







## Wolf at PNL gates?

Staff and students of the Polytechnic of North London are alive and well and working away in Holloway Road. That is the first thing to be said in view of the hysteria generated by *The Rape of Reason* (report page 10, review page 29). If there ever was an attempt to destroy the polytechnic, it has failed. Even the three authors agree that there have been no violent incidents since November.

On the other hand, there have been moments during the past four years when it must have been unpleasant to be at the polytechnic, whether as teacher or student. Farism is a loosely and inaccurately used word; but a number of the inclusions used by the authors to illustrate their thesis merit the term left-wing fascism.

This said, *The Rape of Reason* is a son of an and a splendid shot in a propaganda war. Other opinions—and equally selective and one-sided—truths have been circulated. All such accounts should be treated as evidence, not proof.

The campaigner made by the three authors has been to take the student propaganda seriously. Because student leaders say they are aiming to make the polytechnic a "red base", it does not follow that that is what they are succeeding in doing, or that it is what their followers think they are doing, or that it is what the conflict is about. Yet people who should know better have fallen into the same trap. Lord Annon, whose letter in *The Times* of July 3 was based on a preview of the book, is one. And Bernard Levin has de-

voted all his allotted space this week in *The Times* to an impressionistic tirade against the totalitarianism of the left, starting with a long extract from *The Rape of Reason* on Tuesday and ending today with *Brave New World*.

It is true that some universities in the United States, Germany and Denmark have become places where generally accepted academic standards of behaviour and teaching can no longer be applied. That is serious; but there is no evidence that those countries are the victims of the sort of conspiracy that will lead inevitably to the Orwellian nightmare. It is serious if the same thing is happening in one of our polytechnics, though the evidence suggests that, at most, it was confined to one or two departments, but it does not signify the end of all that is best in Britain.

And finally, there is the old, old argument, still valid, that no revolutionary seed, however zealously planted, can bear fruit if the soil is not ripe. Many people, even among those who originally supported him, must now be regretting the appointment of Terence Miller as director. And there really is no element of disaffection away from the 70 members of staff who are reported to have supported the student line? Was it really just cowardice?

Dr Boyson's call for shutting down the polytechnic for a year is extreme, but there may well be a case for an independent committee of inquiry to establish all the facts.

## On the mountain top

The Headmasters' Conference made a noble, if not altogether successful, attempt to eschew politics when they held their annual meeting at Manchester last week (page 13). Under the benign influence of the Reverend N. F. Berry, OBE, the headmaster of Ampleforth, they faced their thoughts on higher things and listened to uplifting addresses by, among others, Mr J. S. Woodhouse, the Headmaster of Rugby, and the Reverend Aired Wethin, a former head of Downside. They were also dazzled, entertained, and amused by a paper of great brilliance by Professor Gordon Rupp, a Methodist Minister, who happens to be Dilettante Professor of Ecclesiastical History at Cambridge, who managed to make inspiring sense of 2,000 years of Judeo-Christian culture and expose the difficulties of Christian education in post-Christian times. There were times when the conference seemed to feel obliged to assume that all HMC schools are as supremely concerned as Ampleforth to carry out the religious objectives of their foundation. Some of the conversation over the coffee cups suggested that not every headmaster felt that this corresponded to their experience, but at any rate it made a change from politics.

The direct grant issue cropped up from time to time, inevitably. Nobody knows how many schools will give Mr Mulley the pledge which he is asking for: nobody underestimates the difficulties facing those schools which cannot go independent, yet do not fit into any local scheme. Anybody who hopes that the direct grant issue is just a flash in the pan, who thinks that the transitional period while the last of the grant-aided pupils are working their way through the system, is a temporary inconvenience, is promising himself a very long wait. The re-introduction of the system, long as they maintain such a promise with credibility.

Some direct grant heads suggest that after a couple of years, it will be impossible to unlearn the gaudy tricks of the system, to bring back the status quo ante. They would have to work out some new scheme, and to do this they would have to clear their minds on a whole lot of topics—like teachers, who then, of course, if they really did introduce their counter-revolution, it would have to survive the swings and roundabouts of governmental elections. Small wonder the HMC devoted so much time to eternal themes.

Sir, By the time this letter is published Sir Alex Smith will be established in the chair of the Schools Council, and I would like to seize the opportunity of offering to him my congratulations and good wishes. The main purpose of this letter, however, is to make a few comments on the letter (September 25) which Sir Alex will have received and your letter from Professor Wrigley. The main purpose of this letter, however, is to make a few comments on the letter (September 25) which Sir Alex will have received and your letter from Professor Wrigley.

associations to discuss these matters. The suggestion for a conference which Professor Wrigley puts forward from a range of the minutes of our recent meeting in which we have decided to do what is suggested in the professor's letter, which might be a valuable standing. For research, it is an excellent idea, but it is not clear how it will be carried out. It is not clear how it will be carried out. It is not clear how it will be carried out.

## Save our teachers' centres

Harry Kahn

Two developments now taking place side by side in teacher education could, looked at in isolation, be considered complimentary. One is the teachers' centre movement which has revitalized the in-service education of teachers by looking at the client, the teacher, as a professional requiring support. The other is the drastic reduction in the number of places required in the next decade for the initial training of teachers and the resulting cuts in the colleges of education.

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has depended too on their locality and easy accessibility, to those working in the I.A.S. schools. Recent research into what teachers need from in-service education has revealed their reluctance to take part in activities which mean being away from home or travelling long distances. Local Teachers' centres enable teachers to go there easily and after a day's work when, regrettably, most in-service education still takes place.

Closely linked with locality is the flexibility of centres which ensures that programmes can be fitted to the in-service needs of teachers in the catchment area. The programme of university schools of education, which provides courses leading to higher qualifications—for which there will always be a need in a comprehensive in-service programme—must be planned and delivered well in advance. They cannot instantly respond to expressed needs of teachers in a locality. Their staff, unlike wardens and leaders of centres, cannot maintain the same constant end close liaison with local schools and their staffs.

But the decision-making and programme planning committees of teachers' centres are not confined to their buildings. Increasingly, centres are erasing school-focused activities either for a specific need of the staff of a particular school, or for a joint programme for some of the teachers in neighbouring schools. The secondary school and the primaries in its catchment area, for example.

This type of flexible and cooperative planning emphasizes some of the values inherent in any plan to use spare time in colleges for in-service education or for teachers' centres, as postulated at present by the DES.

Massive cuts in numbers for the initial education of teachers have left a surplus of people and institutions. However, in areas where a dialogue has been set up between teachers' centres and colleges of education, it soon becomes obvious that the same personnel who are in demand by the colleges for their education are also the ones sought after by teachers' centres for local in-service education. And the same people, seen not sought after by either, must one side or the other then suffer in the name of rationalization.

Teachers, now accustomed to in-service education from the use of effective staff, will certainly not want a return to the old style of training. Nor will teachers, who in teachers' centres have controlled their own in-service education, allow a decision-making to pass to the faculty boards of the colleges. The strides towards true professionalism have been so large that we cannot now revert to an imposed system, and whatever system of committees to deal with in-service education eventually emerges from the discussion now going on in the DES it is clear that central

of in-service planning must be left to the majority. On national committees, leaders must also be seated.

In a period of such change, it is not surprising that some teachers' centres have some difficulties in making decisions to make, maintaining, and ensuring that they could be thought of as "any" will not be catastrophic. One I.A.S. in the Home Counties cut the work of its teachers' centres led by a headmaster, and the work of the centres was taken over by the headmaster.

The proposals—which the Government must regard as wildly unrealistic—may have owed some of their success to conference procedure. The executive were clearly expert. The conference to accept their recommendation to run the centres.

But after some confusion when the proposer and seconder seemed to disagree, the proposer, Mr Vincent, refused to accept. The executive then advised the conference to reject the motion.

A vote was taken after Miss Joan Lebor, the junior education minister, had spoken on the motion but not directly against it.

The proposals also had the advantage of following a more extreme but vaguer education motion proposed by Mr Alan Runswick of the National Organization of Labour Education. His rapid assertions about the role of employers in education seemed to leave the conference, unfamiliar with the class assumptions of student politics, more bewildered than roused.

By dismissing Mr Runswick as a "barrister" (the jargon-sounding left-wing student character of Private Eye), the supporters of the successful motion were able to sell their motion as being desirably progressive without being extreme.

Proposing, Mr Runswick said that the Government should use the fall in the birth rate to improve pupil-teacher ratios. Private schools had better ratios, and if they were right for private schools they should be right for public schools.



Left to right: Vincent Rosewell, Dave King, Alan Runswick and David Robinson.

## Classes of 25 by 1980 urged

PHILIP VENNING  
reports from the Labour  
Party conference at  
Blackpool

The Labour Party is now determined to abolish private education and reduce class sizes to 25 by 1980, as a result of a narrowly successful motion at the party conference at Blackpool on Monday.

The motion also called on the Government to introduce a new Education Act which would extend nursery places to all three to five-year-olds, and selection at 11, and re-examine the binary system of higher education.

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that there was always a well-out from education debates in view of the enormous amount of money spent on it.

It was wrong to talk about Tory and Labour education cuts in the same breath, since there was a big difference between the two education policies. Labour had given teachers the lion's share of the increase which had made teaching an attractive profession and had reduced teacher turnover, she said.

She stated that there was a widespread feeling, probably shared by many at the conference, that universities could be run more efficiently. The Government was not cutting higher education—it was asking universities to expand less rapidly in line with party policy.

She reminded the conference of the progress that had been made in comprehensive education and attacked Mrs Margaret Thatcher for challenging what were now well-tried systems of education.

Were the Tories going to dismantle the comprehensive system? They could not do so because the argument had already been won. But comprehensive schools should make sure that they were not just grammar schools under a new name, she said.

The Government had a long-term aim of reducing class sizes in the early 1980s. They were committed to that programme and were determined to see it achieved.

In the earlier debate on employment, Mr Hugh Scallan of the Amalgamated Union of Engineering Workers (who did remain behind for the education debate) repeated the appeal he made on behalf of unemployed school leavers at the TUC conference.

Otherwise little direct reference was made to them, though the conference rejected a motion which called for a scheme to compel employers to take on a fixed proportion of school leavers, and funds for further education to increase training for young people.

Mr Devo King of Wycombe Labour Party said that they had enough of circulars and letters about comprehensive schools. The Tories, he said, should be carrying out their own duties.

The education debate was squashed in at the end of the day's session and immediately after Michael Foot's fiery conclusion to the employment and incomes debate. So it was not surprising that this debate was poorly attended (most of the Cabinet were there for some of the time, although Mr Harold Wilson was missing).

Many who remained were talking loudly and Mr Fred Mulley, the conference chairman, had to call for order repeatedly.

Replying to the debate on behalf of the executive Mr Lester started by saying how surprised he was

Mr Mulley, the Education Secretary, has been told by the two major local authority associations and the largest teachers' union that the Easter school leaving date should be abolished when the earlier summer leaving date is brought in next year.

When Mr Mulley announced in July that the earlier date, the Friday before the spring bank holiday, was to be introduced from next year, he asked local authority associations, teachers' unions, the TUC and CBE for comments on possible effects on the Easter leaving date.

The Association of County Councils and the Association of Metropolitan Authorities, who represent local authorities in England and Wales, have both come out in favour of leaving the earlier summer leaving date.

The education and housing services are withdrawing from their social responsibilities, Miss Kay Richards, chairman of the British Association of Social Workers, said at their conference in Edinburgh this week.

"They pass the most difficult tasks on to the local authorities without the necessary resources to do them," she said. "The local authorities are being asked to do more and more, but the public must not be allowed to forget that care costs money."

## SRC call for better pay to attract postgraduates

by Bob Doe

The Science Research Council are proposing to pay higher grants to attract students to projects beyond the arc of special economic importance. A report on postgraduate training published by the council this week says: "No major progress will be made in engineering research in this country until really able students can be attracted into postgraduate courses."

The lack of flexibility in postgraduate grants is "lamentable", compared with other countries, the report, which comes from an SRC working party, says. It also recommends new broadly based postgraduate courses to PhD level, based on taught courses in addition to thesis and project work. But in their annual report, the SRC announced a 9 per cent reduction in the number of postgraduate grants, more cuts in expensive science research and a concentration on research projects of major national importance.

The annual report says the council's own budget has been cut by 2 per cent in real terms in each of the past two years, and little growth in funds is envisaged before 1980. They want to increase their support to universities and polytechnics and have had to make several major projects to which they attach considerable importance for the maintenance of British research standards.

Bar the council's science board are considering whether to give a 10 per cent support to projects beyond the "pump priming" stage. They are also considering whether they should support more senior research workers at a time when universities are often not filling vacancies nor taking over responsibility for projects initiated by the council.

In view of their financial position, the council have decided to reduce the numbers of postgraduate awards by 350. They will also restrain spending on expensive programmes such as high energy physics.

Through the report says they want a "balanced programme of basic research", they intend to ensure that projects of greatest national importance get adequate funding. A report of the Science Research Council 1974/75. HMSO £1.60.

Lord Crowthier-Hunt, Minister for Higher Education, confirmed on Saturday that he has killed off one of his favourite subjects. Manpower planning, the minister's belief that universities and students should be free to choose their own courses to run and follow, is now officially dead.

It was not the Government's job to say what should be taught, he said at a meeting at Nottingham University. "Governments are there to provide the resources, not to tell the universities how to use those resources, what courses to run or what to teach."

"It is a fundamental feature of democracy that our universities and institutions of excellence should remain resolutely independent of government."

This contrasts with the minister's famous speeches earlier this year when he first put forward the notion of manpower planning. He said that universities and polytechnics should produce people best fitted to serve the nation's needs.

## HARRAP'S HANDBOOK FOR LITERACY TUTORS

Janet Roberts,  
Head of the Adult  
Education Centre,  
Central Leeds

This is the book literacy tutors and all those concerned in the teaching of reading to adults have been waiting for. It will be particularly useful for volunteer tutors at present coming forward in response to the adult literacy campaign, who may or may not be teachers but who have little or no training in the teaching of reading. It contains practical information on various teaching methods; what to start and how to plan a teaching programme; reading failure; its diagnosis and specific remedial measures; and a number of other topics. The book is written in a clear, accessible style and is suitable for use by both teachers and non-teachers. It is a valuable addition to the bookshelves of all those concerned in the teaching of reading to adults. The book will fit into a pocket or handbag.

## THE HARRAP SPELLING BOOKS

Kenneth Anderson

These four books provide an intelligent and logical approach to the difficult problem of training primary children to spell the words necessary for progress to be made in all school subjects. Although not designed for adults, Janet Roberts has inspected these books and she recommends them, especially Books 3 and 4, for work in the adult literacy field.

Book 1: £0.70. Books 2 and 3: £0.75. Book 4: £0.65.

## LEGAL ASPECTS OF INDUSTRY AND COMMERCE

W.F. Frank and D.V.E. Royall

Only two years after the publication of the 11th edition, the repeal of the Industrial Relations Act 1971 has necessitated a new edition of this book. The Industrial Law section has been completely rewritten and all other topics in the book have been brought up-to-date. The new edition is a valuable addition to the bookshelves of all those concerned in the teaching of reading to adults. It is a valuable addition to the bookshelves of all those concerned in the teaching of reading to adults.

## HARRAP BOOKS

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# Keep the young out of prison, say MPs

Last week the Commons Expenditure Committee published the results of an 18-month examination of one of the most criticized laws of recent years—the Children and Young Persons Act 1969.

As well as demanding an end to the practice of sending unruly youngsters to adult prisons, the committee propose new powers for magistrates to lock up young criminals in community homes.

The law, they say, cannot be expected to work without more places in these homes. There must also be a wholesale expansion of facilities to treat young criminals outside the walls of institutions.

Much less use must be made of social workers to administer the law. The Act, says their report, is "not guilty" of pushing children further into crime. No legislation could make any significant difference to the level of juvenile misbehaviour.

While it is true that there is more juvenile crime than before it was passed, the rise "almost exactly parallel" the increase in crime in general.

All children commit offences; most get away with it. Whether a child crosses the boundary between mischief and criminality depends on social deprivation more than on any other factor.

The major failing of the Act is that it has not properly differentiated between most young offenders, who need care, welfare, better education and more support from society, and the minority, "who need strict control and an element of punishment."

What is needed now is a major shift of emphasis away from custody and punishment, and towards intermediate treatment schemes, supervision, and non-residential care like fostering. Most of these changes could take place without changing the law.

The report deals first with one of the most criticized features of the Act: putting children in adult prisons and remand centres because community homes say they are too

under proper supervision.

Magistrates have to give the permission of a magistrate and NACRO, the crime prevention body. Both feel that more secure places are a waste of money which could be better spent on non-residential care.

One of the objects of the 1969 Act was to cut down the number of children getting custodial sentences, and give more non-residential care. The reverse has happened, and magistrates have been imposing for example fewer "supervision orders" (the old probation order) and more custodial sentences.

The reason for this, say the committee, is that social workers, not probation officers, are in charge of children under supervision. Many magistrates feel that the "generic" social worker does not know enough about juvenile delinquents and is likely to be too lax.

The committee want magistrates to be able to put a probation officer in charge of a juvenile, and to be able to impose conditions on the way the order is administered. If young people do not cooperate it should be possible to impose fines and make them go to attendance centres on Saturday afternoons.

Social workers in the meantime should get more training in dealing with young criminals, and some of them should specialize.

These measures, the committee hope, will encourage magistrates to keep more young people out of borstal, detention centres, and community homes.

The committee note that two-thirds of the 5,000 young offenders leaving borstals and detention centres every year are reconvicted within a short time. Magistrates, they say, should be able to send children to detention centres for between two days and three weeks, the period when treatment is most likely to be effective if it is going to work at all.

Borstals and detention centres are for the minority, however, and the crunch for the 1969 Act has come over community homes—the former approved schools. There are not enough of them. But local authorities have been authorized to spend £23m this year on another 2,300 places.

There will be years before the need (about 8,000 places) is met, and in the meantime up to 40 per cent of the places available are empty because there is no staff for them. Again, money is being spent to improve the training, pay and status of residential staff, and the committee urges further efforts.

There is no need, they say, for residential staff to have to live in community homes when they are not on duty. They should have their own houses. And more part-timers should be used.

Another reason why it is hard to get young offenders into community homes is that hands were permitted by the 1969 Act to turn them away. The committee say that if heads think that a particular child would spoil life in the home for the rest, they ought to be able to say so. They suggest that heads in an area should form a committee each in turn, and left without proper help.

But the best way to relieve pressure on community homes, say the committee, is to treat children in the community itself. Up to 80 per cent of children could be outside, at much less cost.

The 1969 Act envisaged a host of intermediate treatment schemes which would provide children with stimulating, demanding activities

# Funds dry up for courses for elderly

Some of the empty places in colleges of education could be used to run education courses for the retired, Lord Crowther-Hunt, Minister in charge of higher education, said last week.

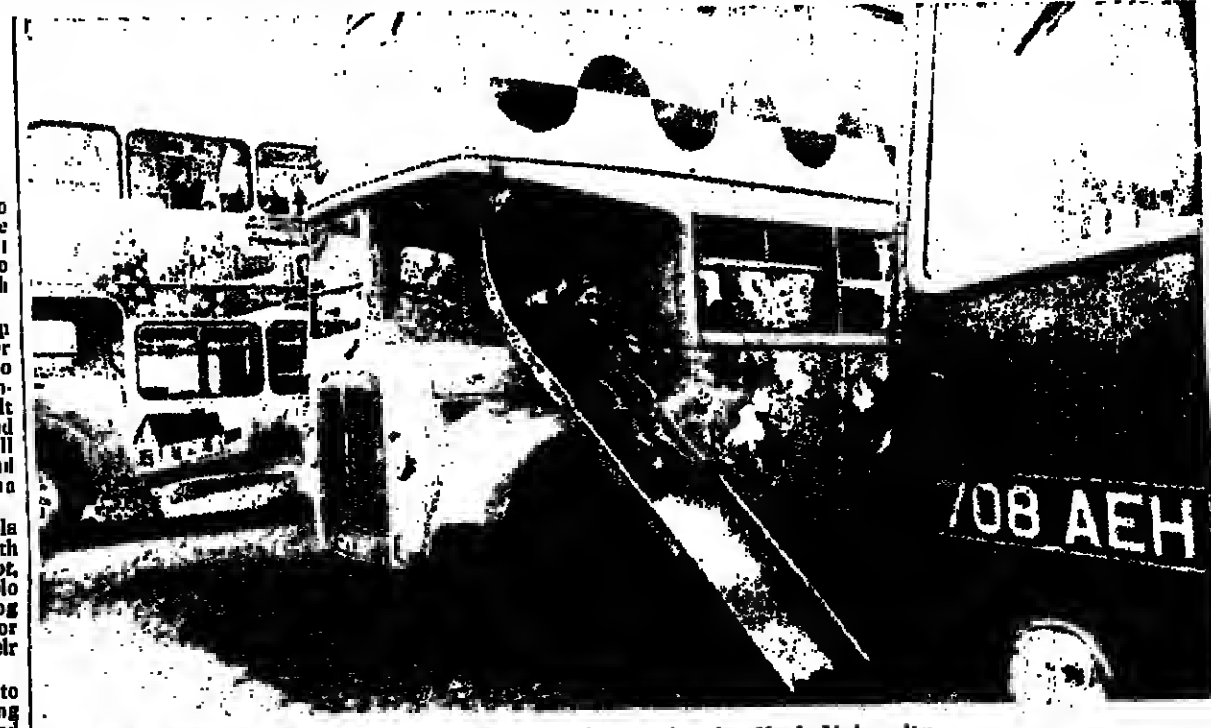
Opening a conference at Keele University, on education for the elderly, he said more courses were needed for the over-60s, but public money was not enough. There would be no extra money for the courses, a great deal could still be done. Existing buildings could be used more efficiently; retired teachers could be brought in to teach; and many old people would take other old people by the hand.

By 1980 there would be 15 million over 60s, and many would want to live full and active lives. Retirement need not mark the end of a person's life. It is a time for re-evaluation, a time for creating new opportunities and for generating new interests.

One of the basic problems about education for us when we are old is the low expectations which many people have of us. Far too many assumptions were made about the people's interest, or lack of it, in education and about their ability to learn. But it does not mean that a mind necessarily ceases to be active, or that a man or a woman's interests suddenly become restricted and stereotyped.

In a working paper prepared for the conference, Mr. Sidney Juncy, North London Polytechnic, said education for the elderly could swell the number of old people in universities.

Universities, further education colleges, polytechnics and colleges of education should have an open attitude to the needs of the elderly. They could run existing courses, but at a slower pace.



Fun on the buses at the annual playbus rally held last weekend at Keele University.

# Leicester to get eighth all-in plan

Leicestershire county council have asked their education officer, Mr. Andrew Fairbairn, to draw up yet another plan for reorganizing secondary schools in the city of Leicester.

Last week the council agreed with the education committee that they should accept a compromise drawn from a combination of two of seven plans originally drawn up by the authority. The two plans are known by their numbers—Six and Seven.

The schools subcommittee and the education committee both favoured Plan Seven. This included a few 11-16 comprehensives, but would have brought the city much closer to the system of 11-14 and 14-18 comprehensive schools established in the old Leicestershire county.

It was originally expected that Plan Seven would go ahead, but a stalemate was reached following a successful campaign against it by parents, teachers and some politicians who preferred Plan Six. This proposed 11-16 comprehensive schools and sixth form colleges.

Now it seems that yet another plan which will be a mixture of Plans Six and Seven, and will probably be called Plan Eight, will eventually be introduced in the city. The county council have called a special meeting for November 3 when they hope to make a final decision, and they could stop selection in the city by September, 1976.

Under Plan Eight the city's existing grammar schools would maintain their present age range of 11 to 18 and the secondary modern schools would continue to take children aged 11 to 16.

Mr. Nathan Harris, chairman of the education committee, said he was optimistic that the county council would approve the compromise.

"Regrettably, I now regard Plan Seven as unobtainable," he said. "My biggest regret is that the school system will still be partly unimplemented, which means that many less advantaged children will still be examined into two towns schools—the schools which are secondary modern at present—until they are 16."

The compromise plan was an improvement on Plan Six, because it would allow some children in the down town areas to "escape" into all-through comprehensives, he said.

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# Workers pay for leavers

Two hundred workers at the Shell star fertilizer plant at Billingham, Port. Cuthbert, are donating 1 per cent of their wages to pay for three 16-year-old school leavers to become trainees with the company.

The men decided to do this when management announced that they were taking four trainees instead of eight until they were certain of future expansion. The workers, mainly members of the Transport

# Music college wins design award

The Royal Northern College of Music in Manchester has won the 'presidential award' for design management given by the Royal Society of Arts. The award, presented biennially, normally goes to commercial firms. This year it

## CoRT THINKING

from Edward de Bono

It is now clear that CoRT Thinking lessons are less abstract and more usable than was at first supposed. The programme already seems to be the most widely used in the world for the specific teaching of thinking as a skill. This may result from the simple framework nature of the lessons. But a more likely explanation is the readiness of heads and teachers to do what they have always wanted to do—teach thinking as a skill that can be developed by direct instruction.

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#### CoRT I (breadth)

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2. Factors involved
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8. Alternatives
9. Decisions
10. Viewpoint

#### CoRT II (organisation)

1. Recognise
2. Analyse
3. Compare
4. Select
5. Find other ways
6. Start
7. Organise
8. Focus
9. Consolidate
10. Conclude

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#### CoRT IV (creativity)

#### CoRT V (information and feeling)

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**Above: Maria Assumpta College, London—closing in three years time.**

كتاب من الأصول

<p>(with entry under consideration with provisional target of places)</p>				
	St Mary's, Farnham	600	Leicester Poly ; Leicester	500
	Nottingham	750	Nottingham ; All Saints	620
Art	Teesside Poly ; Middlesbrough ; George ; Teesside Day		Tottenham ; Thomas Huxley	400
	Thirsk's, Naitre Name ; St Katherine's	1250	King Alfred's Winchester ; Sarnia St Michael	300
Inst Poly	He Le Salle ; Sedgley Park	850	Sa Sainte Union	600
	F. L. Calder	300	Bishop Usher ; Bognor	750
	Westhill	420	Cullum	●
	St Peter's Salley	●	Hockerville	●
	Wolverhampton Poly ; Wolverhampton Day ; Huxley		Westminster ; St Luke's, Exeter ; Exeter Univ	450
	Peterborough Output	135	St Paul's, Chesham ; St Mary's, Chesham ; Macclesfield	500
				1000

the degree, and the students will be content with the two-year courses and numbers remains to be seen. But the colleges hope they will be its substitute for the training places. But the employers say they don't know much about the field and careers advisers in the schools still to sort out the

keep people in the know," confident," he said.

The 1,500 place training and sports center is to be cut to 600 by September, the target for training years 01 and 02. By 2003, only 300 will be required, the term starts in 2004.

Only students who are being accepted for a training course will be CNAAs. Bechler of EA said: at either: honours level. A small number without these, and being taken on for a specific course, will be mounted as well.

Furthermore, it is to be done for the

These rancors with Mr. Frank George, principal of Dighton, "It is not fair to ask the teachers to do more than they are paid for."

No help is forthcoming from the DES. They issued the maximum figure and have left it to the authority to resolve the allocations. The first decision is obviously needed in the number of more directly affects how many staff will have to be employed.

Maccheter is counting on natural wastage among the 420 teacher trainees to get down to the 420.

At Mother, Gaskell and Manchester. Next year, when the moriger is supposed to come into effect, the students run these courses will be very different from the academic terms. The separate degree program for four years so the students' different needs will have to be catered for until 1979.

Manchester said that any imponderables facing Manchester College must be derived from the policies of agreements already made. Didsbury will be allowed to keep its name in the future, whether, either as the polytechnic or as a faculty or college. It is essential to keep the name alive, Mr. Gerner said, to make sure people will desire.

The principal of Trent Park re-acted, saying the merger was completed, leaving the college feeling somewhat dissatisfied. The merger went ahead. So Dr. Rickard moved his office into the imposing main building of the college of education. "Somebody had to appear to be in charge," he said.

the college has close recommendations from Mr. Clifford C. Krellin, leader for the past 10 years in the state of the polytechnic and teacher training.

There was also among the college staff before the merger the polytechnic and technical schools, and Krellin would be in an excellent position to Krellin said, the evaporated. "Now for the we are in the merger in education. When we are

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Sheffield S1 1WB

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- (i) courses: Oliver Stuart College, Rothamsted Lane SW16 5PH. Tel. 01-875 8273.
- (ii) courses: Froedel Institute, Rothamsted Lane SW16 5PH. Tel. 01-875 8242.
- (iii) courses: Southlands College, 62 Wimbledon Road SW18 2TH. Tel. 01-875 8234.
- (iv) courses: Whitelands College, West Hill, Putney SW15 2BN. Tel. 01-738 4286.



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## In brief

### Under-fives protest

Parents demonstrated outside County Council offices in which last week against plans for education for the under-fives. Dr Trudi Berger, chairman of the Education Committee, said the committee were making a decision on the basis of the evidence in the case. She said the committee were not in a position to make a decision on the basis of the evidence in the case.

### Effects of violence

Essex County Council are to £15,000 towards the cost of a unit to study the effects of violence and its impact on children. The unit will be run by NSPCC.

### Medal winner

John McCabe, a senior King Edward VII School, has received a gold medal from the Council of Europe in Strasbourg, an essay on "Social Stability and Economic Growth".

### Toy libraries

Mr Ray Dore-Boise, mayor of London Borough of Bromley, launched a Christmas appeal for toy libraries. Under the scheme under-fives will be able to select toys and take them home.

### 600 award holders

More than 600 award holders from 150 schools and colleges are studying at British universities under the Commonwealth Scholarship and Fellowship Scheme. The scheme is run by the Commonwealth Scholarship Commission in the United Kingdom.

### OU-college link

The Department of Educational Science have approved a new study that enables students of Milton Keynes College of Education to obtain an Open University degree and an Oxford University teacher's certificate in three years.

### For the sub-normal

A new school for educationally sub-normal children is being built at Elmstead Market between Elmstead and Clouston in Essex. The new school will cost £180,000 and will have an assessment and specialist craft areas.

### Enough students

The Polytechnic of Wolverhampton recruited enough students for its intake for its new course for Diploma of Higher Education. The course allows students to study programmes in accordance with their own needs and interests from a wide range of subjects in humanities and social science.

### Sunday concerts

The Greater London Council arranged a series of ten Sunday afternoon concerts for children and their parents at the Royal Albert Hall, South Bank, SE1. The concerts will be given by the Phillips (piano) and Benjamin (violin) and Gerard Benson (soprano). Tickets cost 65p.

### Career booklet

The Environmental Health Officers Association have published a career booklet, "A Career in Environmental Health". The booklet is available for £1.00, plus postage, from the Association, 100, Victoria Road, London SW14 6JL.

### Brain research

The Open University have published a brief account of the work of the Brain Research Unit, which they claim is "one of the most important research projects in the world". Copies from Walton Hall, Keynes, MK7 6AA.

### US in the curriculum

From August 30 to September 10, the Department of Education and Science are holding a conference on "The US in the curriculum" at the University of Oxford.

## Auriol Stevens looks in on one of Trudi Berger's intensive Italian courses at York.

Meglio tardi che mai (in other words, better late than never) I visited Dr Trudi Berger's intensive Italian course at York. The course was held in a room which had been converted into a classroom. The room was small and the atmosphere was very intimate. The course was run by Trudi Berger, a woman of great energy and enthusiasm. She had been teaching Italian for many years and had a deep knowledge of the language. The course was very intensive and covered a wide range of topics. The students were very enthusiastic and the atmosphere was very friendly.

The 11-day course is for post-graduate certificate and begins with a language assessment and begins with a language assessment. This idea is to demonstrate intensive teaching as much as to teach them Italian but it also serves to remind experienced linguists what it is like to learn a language from scratch and to sit O level.

All the students take O level at the end of the course and they should all pass, those who work hard getting a grade 1. In the eight years Trudi Berger has been running the course at York, there have been no failures among graduates.

The teaching is through conversation, jingles, pop songs, proverbs, questions and answers. There are no formal exercises and no vocabulary lists but there is a good smattering of grammar woven in by way of explanation. Indeed, this course, designed for language graduates, assumes a high level of understanding of grammar and the structure of European languages.

From the first minutes the diminutive professor, Berger, has the whole class of about 50—she doesn't like teaching small groups as they creep her theatrical style—singing and answering questions, repeating a dozen times at increasing volume "buona notte, buona notte" (good night, good night) to the tune of Santo Lucia, thoroughly British inhibitions are swiftly swamped by the sheer good fun.

Indeed the whole thing is a highly polished theatrical performance with a level of audience participation which would do credit to the music hall. Trudi Berger spends long hours in preparation, collecting posters—"I pinched

## Backing for paid study

The Government intend to ratify the International Labour Organization's convention on paid educational leave which will allow workers time off for study or training without losing any pay.

A government White Paper published last week says the principles of the convention are already being applied in the United Kingdom. It is shown by developments in opportunities for the education and training of adults over the last two decades.

As ILO recommendation which relates the principles of the convention and stresses that paid leave is not a substitute for education and training in early life, will also be accepted.

However, no extra money will be made available to put the Government's intention into practice. The White Paper says the ratification of the convention and acceptance of the recommendation "will not lead to additional public expenditure, provision for which will continue within available resources". International Labour Conference, ILO, C202, 225, 32p.

## Fewer awards

The United States-United Kingdom Educational Commission says that there will be fewer Fulbright-Hays awards for postgraduate students in 1976-77. But they will be more numerous for the academic year as well as for travel expenses.

## Chinese studies

Details of courses and combinations of courses at the Department of Chinese Studies, University of London, are given in Chinese Studies Bulletin which is available from the University of London Press, 100, Brook Street, London W1P 2LP.

## Successful

Of 57 holders of Coal Industry Social Welfare Organization Education Awards who successfully completed their courses this year, eight and a half received honours degrees and 36 received honours.



## Learning is like a love affair

this one from a bank in Rome"—decorating the lecture room with wine bottles, books, magazines, selecting records, duplicating sheets of phrases, song words, proverbs. From years of teaching she knows just when to raise her voice to whip up flagging attention, just when to relax the pace by introducing—in English—a bit of general culture or an explanation of how an Italian counts on his fingers.

And like the best prepared things, it all appears to be entirely spontaneous. "A student once asked me if I ever prepared a lesson", she says, and shrieks with laughter at the memory. During the course she is marking papers every night until 2 a.m.

"The courses are like a love affair. I love the students. I want to give them everything. I want them to be happy, to do well, to love Italy. Then after two weeks (disillus-

sive wave of the hand) they go away. I don't want to see them any more. They can do it on their own after that."

The energy and commitment of this approach made a contingent of further education teachers, from Somerset, who were studying the method in York last week, distinctly nervous. "How does she do it?" asked one. "I couldn't keep that up for an hour let alone three hours."

Trudi Berger maintains that her methods are transposable and quotes examples of their successful adaptation by former students. The FE teachers remained sceptical.

Barry King, Somerset's language adviser who was there with his contingent of FE teachers, wanted to see if "this Berger act" (as Trudi Berger calls her activities) was adaptable to schools and FE colleges for the post-exam period at the end of the summer term. He

was less sceptical, then stunned. "She's breaking every rule there is." She translates everything as she goes along, she uses the blackboard all the time, she has students parroting phrases and answers. Yet there are other rules which are observed: she uses all ways of learning, reading, writing, speaking, listening. She forces the students to use every scrap of what they have learnt—that 20-page essay on the first day for example. She insists ferociously on correct pronunciation.

By the end of the first morning, Barry King was clearly becoming a fan, though he is worried that hutching teaching is about to be taken up as the trendy prescription for all language learning and he thinks it is quite unsuitable for children. Trudi Berger would not agree,

though she would teach an entirely different course for children. Before she came to York nine years ago, she taught languages at Keighley Grammar School for Girls within the constraints of a normal timetable—and before that she worked in several girls' boarding schools.

The latter left her so much aware that she steamrollered a reluctant Anglo-Austrian Society in London (she is Austrian by birth, though she flourishes her British passport at anyone who questions her about her nationality) into giving her permission to experiment with intensive German courses. She has now been running them successfully for 20 years.

For schools her blueprint would be that everyone should be given one week of Italian and those who didn't want to go on would then drop it. She won't teach non-volunteers at all. "Enthusiasm is the crucial thing. Nothing works without it."

Once the enthusiasts were selected two terms would be given over to learning conversation, and the Easter holidays would be spent staying with families in Italy—all to be paid for by the i.e.a. In the summer term, they would learn to write thank you letters, postcards, letters to pen friends; and then Italian would be dropped except perhaps as a club activity, say an hour or two a month for fanatic.

In the second year, the process would be repeated with German because it is different enough not to interfere with the Italian. In the third year she would teach Spanish, which makes people forget the Italian a bit but is still easier than French. French would have to wait for the fourth year, and for the fifth year, she suggests Serbo-Croat, "because it's a Slav language and once you know one you can cope with them all."

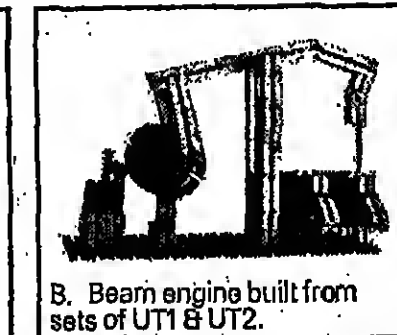
And then Yugoslavia is very beautiful and great fun and it's easy and cheap to get to, unlike Poland and Czechoslovakia.

Such a programme could induce a habit of globe trotting equal to Trudi Berger's own and even stimulate imitation of her hobby: learning new languages. She speaks 15, is qualified to teach five.

It is all a question of energy—and time. "I think God on my knees or night that he never sent me a husband and children."



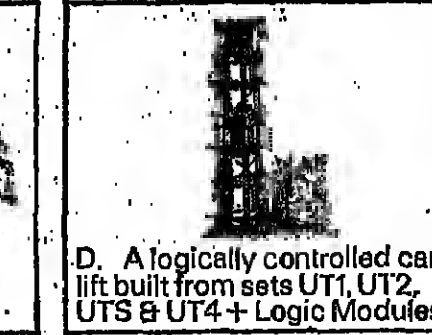
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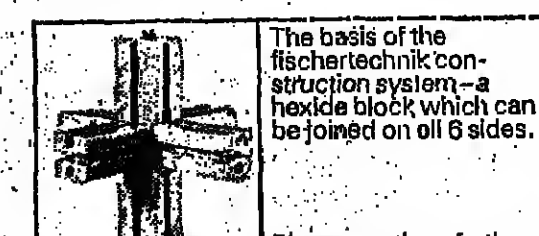
The discussion about pumping engines arose from a lesson on the Industrial Revolution. A group of four constructed the beam engine that is illustrated here (picture B). Interestingly, the individual that arose as group leader was the least able from a purely academic viewpoint, and the situation gave this child a tremendous amount of self-confidence and esteem which will hopefully be carried over into other contexts.

With very little guidance, the pupils translated a drawing of a real pumping engine into a working model. They had some difficulty in selecting gear wheels of an appropriate size and this led to a useful investigation of ratio and

proportion. The effect of pivoting the beam at different points was tried, and by attaching a felt tipped marker to different moving parts of the model so the idea of the locus of a point was 'discovered' by the children. The teacher extended the basic theme by pointing out how in the beam engine rotary motion is converted into reciprocating motion and the whole class became involved in a project on other machines that work on the same principle.

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## LETTERS

## Are we being taken for a ride?

Sir,—May we take it that the latest pronouncement of the Schools Council's joint examinations sub-committee renders obsolete those recommendations relating to assessment at 16-plus contained in its report on the whole curriculum, published just two weeks earlier? Or is there yet another report tucked up its seemingly well-lined sleeve, for publication this week after next?

It might take more than the "semantic skills" of the examination sub-committee's chairman to convince those taxpayers who do not permanently inhabit this cosy closed world of educational speculation, and for whom education is a means not an end, that they are not being taken for a rather expensive ride. If it comes to that, there may well be a substantial number of practising teachers, pegged down to "nil growth", who feel that educational expenditure could be more usefully directed.

No doubt the examination system can do with periodic overhaul, and revision, and if your summary is an

accurate one the latest proposals are not without merit, but have the implications for other examinations been fully considered? What, in this context, is to be the future for the Certificate of Extended Education? Is it to be a species of educational ground work scheme? Will the foundation courses be adequate preparation for A level courses, or is it the intention that they too shall be modified to allow for a greater (perhaps infinite?) number of passes?

The universities are reported as having reservations about these proposals. If the public examination system fails adequately to take account of their selection needs, and those of industry, the Civil Service, etc., is there not a danger that schools will feel constrained, in their pupils' interests, to keep at least one eye on the requirements of an increasing number of private qualifying examinations? And in this sort of situation, will a younger's post-school prospects depend less and less on his objective, examinable merits, and more and more

on the reputation of the school he attended in his ascent, poise and social self-confidence?

Perhaps my misgivings are entirely without foundation; if, however, they are not, the principal sufferer will again be the bright working-class youngsters. Any public examination system must establish credibility outside the educational cocoon, or we shall quickly revert to the far nastier and more divisive system of "It's not what you know but who you know"—and where you went.

We do undoubtedly need a system which provides greater incentives and greater rewards for the less able pupil (partly on humanitarian grounds), but we also need one which enables us to identify and develop the talents of our most able youngsters. If only because our national survival will probably depend upon it, is the Schools Council satisfied that this is what it is recommending?

LAWRENCE NORCROSS,  
Headmaster,  
Highbury Grove School.

## Woolly words from the Schools Council

Sir,—Unfortunately, I am one to whom you refer in your editorial (September 5). I am paid to read such prose as the Schools Council's compromising verbiage. As an industrial training officer I am concerned about the effects of Schools Council proposals on young people leaving school to join my company.

The Whole Curriculum 13 to 16 is typical of the educationalists' blinkered thinking. The report considers a number of loose and woolly ideas for secondary education with few considerations for what pupils are going to do at 16 plus. The report is against terminal assessment, but favours "kinds of assessment which provide teachers, parents and pupils with guidance" for selection purposes. Why can't we have these

"kinds of assessment" and terminal measures too? Is it not the employers in industry and commerce who are the main customers for 16 plus pupils and who require this information to aid selections?

Most employers use examination results (as do further education establishments) to differentiate between levels of achievement, but in addition also use other systems for evaluating the pupils' strengths and weaknesses in order to assess different kinds of achievements. These other systems often include intelligence, aptitude and aptitude tests, testimonials and interviews.

Regrettably, the Schools Council may not know too much about the efforts of modern industry and commerce and consequently do not

appear to consider their needs. Their governing council makes provision for an insignificant representation from industry and commerce.

Come on Schools Council, let's have a more objective approach to curricula and assessments based on the needs of employers, etc., who provide for careers and developments of the 16 plus. Forget the "more liberally conceived curriculum" and get back to the realities and needs of those who matter most. Give the kids the basic skills and knowledge and leave industry and commerce to select, using sound terminal assessments in the form of good old fashioned examinations.

P. M. CORNISH,  
30 Semihills Road, Barnet Green, Birmingham.

## That grading system again

Sir,—In reply to the letters on the AEB (September 19) I would like to point out that the Board gave the following confirmation concerning the new O level grades:

Official Grade	Old Grade	Mark Range
A	55-64	55-64
B	45-54	45-54
C	35-44	35-44
D	25-34	25-34
E	15-24	15-24
F	5-14	5-14

Assuming then, that "part of 3"

means a range of say three marks, grade D is roughly 41-44 and 45-48. This would make grade E roughly 35-38, not with the School Certificate pass and is by no means outright failure!

Roll on 1981!

D. EDMUNDS,  
Head of Mathematics Department,  
and Examinations Supervisor,  
Samersley Comprehensive School,  
Midsomer Norton, Bath.

## Double check

Sir,—I notice with interest that you are starting a chess column in the TES but wish to point out that your picture of Julian Hodgson contained out-of-date information; the titles mentioned were held by Julian last season (1974-1975). This year's titleholders are Southern Counties U14, Simon Brown and Tony Williams, joint winners; London U12, Daniel Klag.

V. E. WILLIAMS,  
Seale, Farnham, Surrey.

## Centrally heated bureaucrats

Sir,—Like Dr Midwinter, I saw point in Mr MacLure's 14-plus proposals, though as a career secondary teacher whose experience has been in "good schools". I tend to see a different face to social injustice than him.

Early this is the unfairness of the media; one would hardly know from most of the TES's regular contributors that 70 per cent of the teachers polled by TES/NOP last autumn declared themselves against the elimination of grammar schools.

As for Dr Midwinter's general public, I suspect a poll taken now rather than eight years ago would be far from showing them "almost totally opposed to selection". Quite a few of them would even spot that Dr Midwinter is committing a sleight of hand, since there are no proposals to educate every child on the same mega-campus in the centre of England.

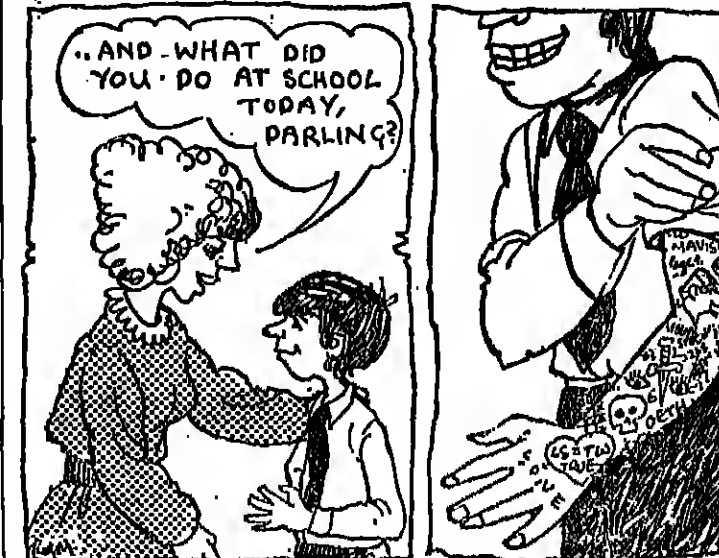
If he were a teacher, he might feel differently about it being an ideal that it should not matter which school or college one attends, since the practice of this would be to deny a school's right to communal achievement. In this respect, his wish for a collegiate-

based 14-plus solution is obvious, it is evident, for instance, that there is a section of opinion that dislikes the direct grant schools precisely because a lot of the one communities with a vigorous identity, apparently, before we can achieve classless we must be made rootless.

As for his complaint that direct grant schools are "privileged" because they enjoy such support from rates and taxes, exactly the same can be said of your newspaper. The "ideology" of its editorial is a product largely of its own making. As for that old western "privilege", it is dawning on many teachers that their careers are increasingly at the mercy of what can look suspiciously like an over-politicized bureaucracy.

Though I may teach basic civics at Canterbury Cathedral, my preoccupations are slight beside those of centrally-heated bureaucrats who claim the right to reorganise, re-educate me, and to zone, draft, or allocate my children.

S. C. WOODLEY,  
10 Erisham Road, Canterbury.



## When childhood is extended

Sir,—I read your editorial comparison (August 15) of American and British solutions to the unemployment of adolescents with considerable interest. The point that Americans have "opted for keeping them on in school" is valid and important in the system. On the

other hand, the American system of education in Britain. Other nations are possible and desirable. Perhaps the proper measure of standards is the amount of education for each pupil or student at the level at which adolescent unemployment is the problem. On the one hand, the psychological and social impact of educational institutions upon an entire generation, not just on those who clear the last barrier to higher education, is considered. These educational institutions are so far removed from the reality of achievement, but we should not prey to the "misplaced concreteness" Whitehead warned about.

The American propensity to solve problems through education is well known to be a mistake. But I submit that as British educators examine the American model, your analysis should be based upon a pluralistic set of standards of measurement.

W. BRUCE LESLIE,  
Assistant Professor,  
State University of New York, Stony Brook.

## Community education

Sir,—We have been concerned for some time at the fragmented image of community education that is presented to educationists, related professions and the general public.

A growing body of information and experience is now available, which indicates that a generic base exists for teachers, social workers, youth and community workers and many other related professions. This common base offers a sharing of skills, attitudes and values in the relationship between such workers, groups and individuals in the community.

The lack of clarity in role definition suffered by many workers with a community education alignment in their job points up the confusion of employers. The existence, however, of such poets clearly acknowledges the importance of which is increasingly being attached to the role of the professional worker in a community education setting.

The issue is urgent and the need fundamental; we believe that the solution lies in the foundation of a national institute which would act to attract as members and maintain to identify, maintain and eventually raise standards of professional practice in the field of community education.

We hope that this letter will be a dialogue between workers in the field of community education.

D. LEE,  
Community Education Centre,  
c/o Eburne Junior and Infant School, Deedmore Road, Coventry.

W. J. PASQUERELLA,  
26 North Street, Middleton,  
near Manchester.

M. HENING,  
Spring House, Oak Lane,  
Kerridge, Cheshire.

J. M. WALTON,  
27 Sompting Road,  
Worthing, Sussex.

## LETTERS

## Deaf ears to foul language

Sir,—The advice given by the Assistant Masters Association to teachers should, indeed, resign from the profession, or also should those teachers who turn a deaf ear to obscenity in the classroom. It is

because foul language is apparently accepted by teachers and other adults in a position of some authority that its use is on the increase.

Of course such language is intended to shock, and teachers would do well not to display undue surprise, but the casual acceptance of obscene and bad language in the classroom leads to the complete breakdown of discipline, and is the cause of teachers asking school members of staff to control their pupils for language which is abusive and

them. Very often the pupils for whom foul language is used to the teacher, and its acceptance by one member of staff in the school can do much to undermine the position of the rest of the staff.

The advice to turn a deaf ear comes most often from those who do not have to deal with some 30 young children at any one moment, but who pontificate from the sidelines. There are many parents who would be most unhappy, and rightly so, if the acceptance of such language was to be the norm for the school which their son or daughter attended. Such members of staff would be unwelcome at any school which sought to raise standards rather than see them depressed still further.

R. HUMPHREY,  
Headmaster,  
Stanford Middle School,  
Mitcham, Surrey.

## Neither corrupt nor stupid

Sir,—Mr Woolsey (September 5) and Mr Rosslyn (September 19) have both commented adversely and especially in Mr Rosslyn's case, highly emotively, on the present system whereby the head recommends, through the governing body, the promotion of his staff. Such phrases as "courting the head assiduously", "sucking up", "moral pollution" and "whizz-kiddery" (whatever that is supposed to mean), suggest that heads, if they are influenced by this, are either corrupt or stupid or both. I like to think that, by and large, we are neither.

Mr Rosslyn's proposed alternative two-tier system based on seniority but with "opportunities for advancement by other means" begs the whole question and would help nobody. In our school no recommendation for promotion to Scale 2 is made without consulting the relevant departmental heads and, in the case of scales 3 and 4, the deputy heads. The existing scale is considered. Having said that, the final decision for recommendation must be mine, since I believe that I ought to be in the best position to do this. With a large number of staff worthy of promotion and very few points on one's disposal, this is a difficult, worrying and unhappy task. But it's one of the things I'm paid to do.

I would just add that this will neither work nor be seen to, be less, unless all the staff know on whom scale their colleagues are and secrecy is totally eliminated.

PETER HEYWOOD,  
Headmaster,  
The William Sharp School,  
Bilborough, Nottingham.

## Discrimination in jobs scramble

Sir,—I am encouraged to write this letter on reading the crusading article by Mr Mark Jackson (July 1975) on the matter of non-white teachers in British schools.

Nine of us, Asian immigrant teachers, have recently completed an overseas teachers' course at Wolverhampton Teachers' College. Out of the nine, only three have so far got jobs.

When there is scarcity of jobs, it is the coloured who are most vulnerable. In the frenzy of the fight against inflation, racial discrimination should not be allowed to go on unchecked.

V. S. SHARMA,  
Wem Garden,  
Wolverhampton.

## Richmond ratios: a good average

Sir,—I am glad to be able to tell you that Richmond upon Thames are happily far from setting a record this year for the highest primary pupil-teacher ratio (September 19). On the contrary, the current ratio is 1:24.4, which, according to the Society of County Treasurers' figures, is the London borough average and slightly better than the metropolitan districts' average of 1:24.5.

This is all the more satisfactory because our secondary pupil-teacher ratio (1:16.6) is better than the averages for all English counties (1:17.1) and metropolitan districts (1:16.9) and in the middle of the outer London league.

You were right in saying in your article today that the county treasurers' figures published by the Chartered Institute of Public Finance and Accountancy show a primary ratio as 1:23.5, but this figure is incorrect. The error arose because the time for submission of the statistics to the Society of County Treasurers cut across the later stages of completing the education budget.

I would not want you to infer from this that we were ever contemplating a ratio as high as 29.5, but we did at one time consider not admitting children until they reached statutory school age. It is the lower number of teachers which

would have been needed had this policy been adopted (in fact we are admitting at rising-five), coupled with an unadjusted and over-high estimate of total primary roll which went, whilst our budget policy was still being hammered out, to the Society of County Treasurers.

I hope that you can give this letter some prominence since we have received a considerable amount of unjustified criticism of our pupil-teacher ratio this year. The figures I have given above are actual figures, not estimates, for the new school year.

D. NAISMITH,  
Director of Education,  
Richmond upon Thames.

## Part-time students feel the pinch

Sir,—I am at present doing a part-time teacher training course at Maria Gray College of Education, Isleworth. Last year I had a grant of £367. I was informed by my local authority that this year's would be £330 due to the Married Women's Act. As I am doing a three-year course in four years I am entitled to three-quarters of the full grant plus extra for the block courses I have to do in the vacations. Now the DES have written to all the authorities stating that we are now only

entitled to £180 a year due to their classification of the course as being one taking less than three days a week.

In fact this year I am doing two half-days in college, doing main field subjects with the people on the full-time course, two half-days doing teaching practice in my local school and two evenings a week doing education and curriculum studies.

The DES refuse to recognise that the two evenings correspond to two half-days.

As many of the people on the course are married women with children they have had to arrange for someone to take and fetch their children from school on the days their attendance is required at college. The £180 does not even cover their expenses, let alone provide money to buy books with or the materials required for teaching practice.

MELINDA M. SHEPHERD,  
99 Pennine Way,  
Hartington, Middlesbrough.

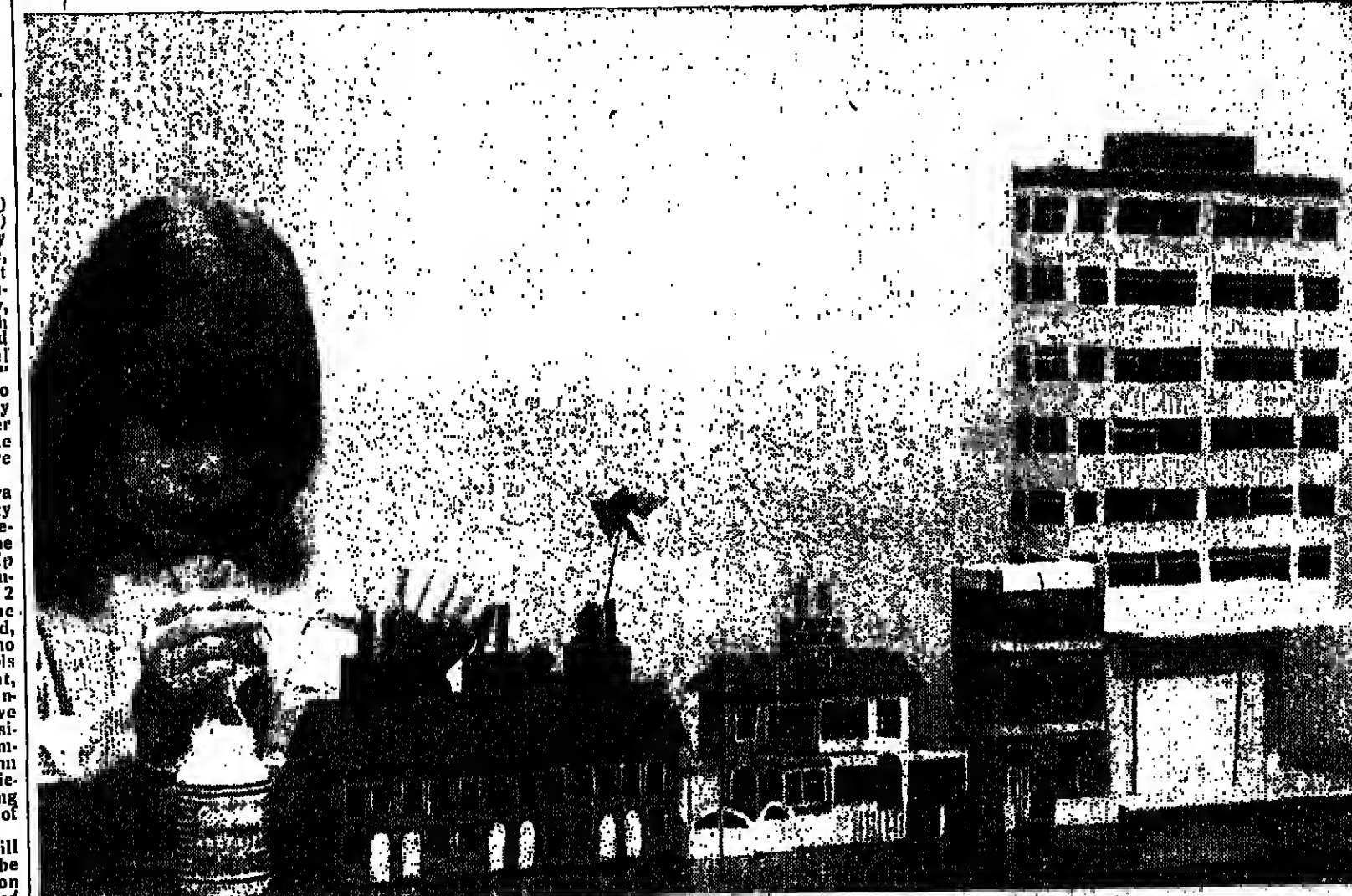
## Dismay over Harry Rée

Sir,—I have listened with mounting dismay to Harry Rée's broadcast each Thursday evening on Radio 4. His feebly expounded arguments in favour of every educational innovation are, unfortunately, taken seriously, coming, as they do, from a man with some standing in the world of education.

On September 18 in support of a plea for mixed ability teaching in general he included a comment by Donald Frith who was introduced as "Headmaster, York". Mr Frith's remarks sang the praises of mixed ability teaching, but what most of his listeners would not know, and were not told, is that Mr Frith is head of a selective grammar school with a total ability range covering only the top 18 per cent or 20 per cent of the school population. This is a very different thing from a comprehensive ability range covering nearly 100 per cent.

Perhaps one should not be too concerned about Professor Rée's ideas since he concluded his third broadcast, after dismissing the attitude of pariahs as too examination orientated, by suggesting that a school's policy and direction should be continually reviewed by a board consisting of people from the local community. Like parents!

DEREK COCKCROFT,  
3 Orclard Close, Dringhouses, York.



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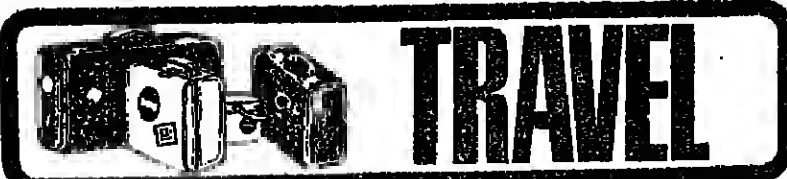
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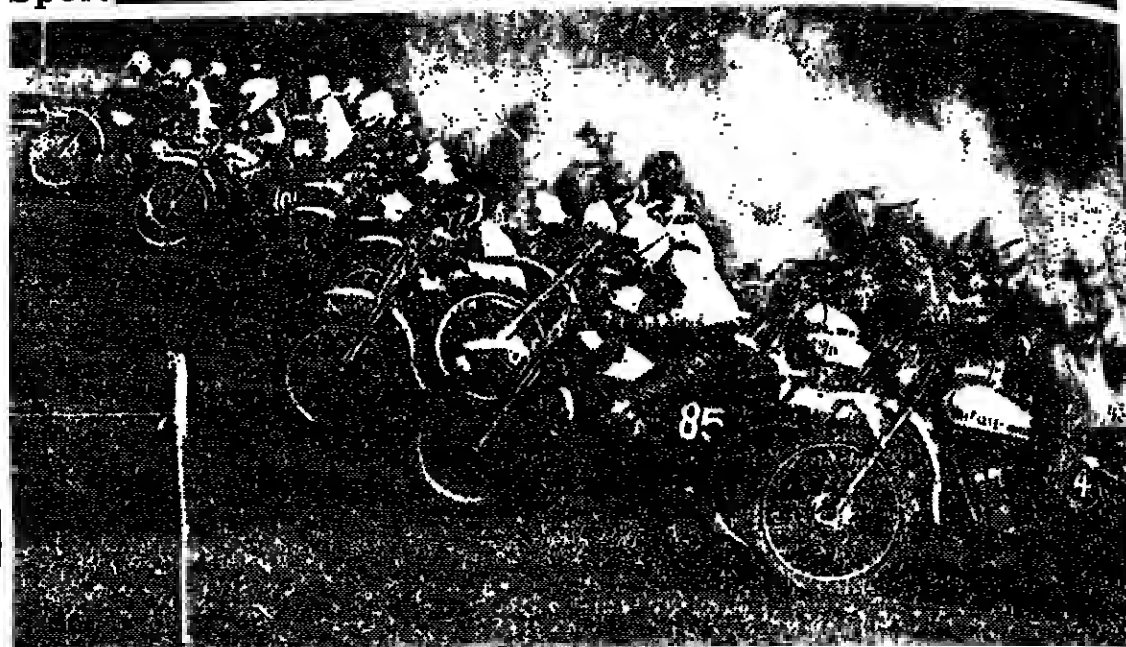
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## Sport



Massed start of an intermediate race.

## Motorbikes battle at Naseby

by Asif Khan

Members of the North West Schoolboys' Motor Cycle Club dominated the recent National Youth Scramble Championship at Naseby, Northamptonshire. They won three top prizes, the senior consolation award, and four other prizes.

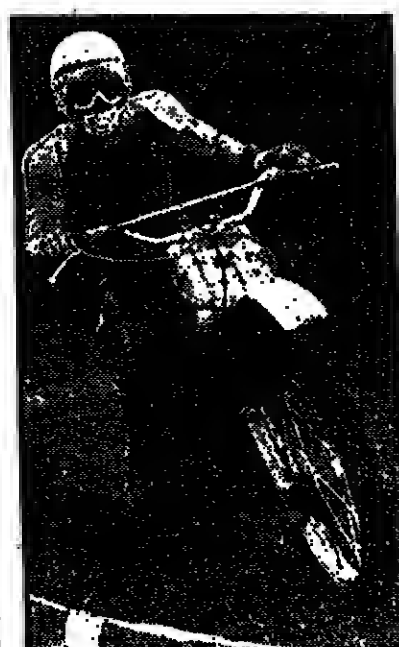
The only major title they failed to capture was in the senior section race which was won by Paul Hunt, aged 15, who attends St Paul's Comprehensive, Addlestone, Surrey, and is a member of the Horsham Schoolboys' Scramble Club. He rode a German machine, the 125 Meico.

Unlike their ancestors at this famous venue, there was no acrobatics among the 170 youngsters who had assembled, under the watchful eyes of their parents. The event was organized for the first time under the aegis of the Auto-Cycle Union. The boys, aged between six and 16, gave a superb display under treacherous conditions.

For the North West club, John Reynolds, aged 12, a pupil of Kimberley Comprehensive, Kimberley, Nottinghamshire, took the intermediate first prize on his 98 Suzuki; Russell Brown, aged 10, of The Park Primary School, Tettenhall, Chester, won the junior race on his 80 Aspas, and Mark Condit, aged eight, who attends Byley Primary School, near Holmes Chapel, Cheshire, won the cadet race on his 50 Itel.

Duncan Adamson, aged 14, who won the senior consolation prize, is a pupil of North Cestrian Grammar School, Ainslie, Merseyside. He rode a 125 Yamaha.

The club has 186 members who are mostly drawn from schools in Cheshire, Staffordshire and Lancashire. They hold their own scrambles.



Paul Hunt: lone outsider.

ling and race meetings throughout the spring, summer and autumn. They have a "nursery track" in mid-Cheshire where the younger boys are able to practice in safety and under supervision.

The Naseby championship was held round a mile of rough country that presented the young riders with all kinds of hazards and demanded not only skill and endurance but grit and courage. There were jumps and bumps, a stream and climbs up and down steep hills.

The riders impressed Mr Dick Bracher, general manager of the

ACU, who said the boys demonstrated a "very high standard" of riding. Some of the seniors made the International grade in a couple of years.

Until last year, he said, they competed in championships controlled by a number of organizations in an effort to end this fragmentation and bring some unity to the schoolboy scene the ACU formed Youth Division last year.

The Naseby scramble was the fourth event this year. The 15 was a junior trials championship, and the intermediate and triathlon championships on York Minors.

Although the Junior Motorcyclists Federation has gone out of existence, making way for the Youth Division, the British Schoolboy Motorcycle Association is active. "We're hoping they will come into the ACU."

"Our Youth Division is growing rapidly. We started from nothing a year ago, and now we have 50 jointing clubs." Even girls are joining.

One reason for the growing interest was that they no longer had to wait until they were 16 to take part. "And, of course, a lot of parents are interested and are anxious to encourage them. You get many of these lads on summer camps or at football matches. It is a clean, family pastime."

Only a few schools in Britain have motor cycle clubs of their own. The ACU will "do all we can to help" others. Their address is 31 Belgrave Square, London SW1 8QQ.

## ASA looking for coaches

by Stanley Levenson

Schools diving standards are good, but there could be more and better divers if it were not for a shortage of skilled coaches, says Mr John Wardley, a member of the diving committee of the Amateur Swimming Association.

This is a more telling factor than the shortage of proper pools and the ASA are looking for a way out by considering changes in the Teachers' Coaching Certificate.

Mr Wardley illustrates his point about the quality of schools diving by pointing to the number of senior champions and internationalists who will be competing tomorrow in the English Schools' Swimming Association diving and team championships at Highgrove Baths, Epsom, Middlesex.

Christopher Shode and Linda Cardewine (Doverbury) are both ASA diving champions. David Pook (Morden), last year's schools junior champion, competing tomorrow in the intermediates, Janet McGee (London), second to Miss Cardewine last year, David Wood (Bushey), last year's intermediate champion, and in the senior age grouping, and Claire

Piper (Derby) are all British internationalists.

Millfield School, which won six events and came second to a seventh last year, are again strongly represented in the team championships which consist of six freestyle and six medley relays. Six of their swimmers have again come through the qualifying stages to challenge in the finals.

Chatterfield School will be in five events, Bradford Grammar are in four as are Blahop's Stortford College. Surprise absences are the winners from Gregg School, Southampton, who won both intermediate relays last year. Representing their division will be another Southampton school, King Edward's.

Based on times returned in the earlier stages, Heath County Secondary School, Runcorn, and Burnt Mill Comprehensive, Harlow, will be the main contenders in the under-14 (junior) section, with Rutherford School, Newcastle, poised for the boys' titles.

Grange Girls' School, Bradford, and Blahop's Stortford beat the girls for the intermediate races.

## Vacation courses

Millfield School's successful series of vacation sports and academic courses for young people and teachers goes marching on. The prospectus for the Christmas and Easter courses is now available, with a range of sporting, academic and artistic activities.

The Easter programme is devoted to sports, but the winter schools offers courses like physics, guitar playing, letterpress printing, French, English, acupuncture alongside sports, hockey, football, shooting and swimming. Adults can sign on for the non-sports classes as well as some of the sports lessons.

Fees for the winter school range from £5 to £17, plus accommodation. And for those living near Strass, Somerset, Millfield is to begin with a month an indoor cricket evening school.

Millfield's sports roll of honour shows that 25 pupils received national honours to the last year, compared with 22 in 1974 and 18 in the previous year.

**24/25**

Common curriculum

**26**

Children's games

**27**

Lord Hailsham on history

**28/31**

Books: language; history; literature; politics

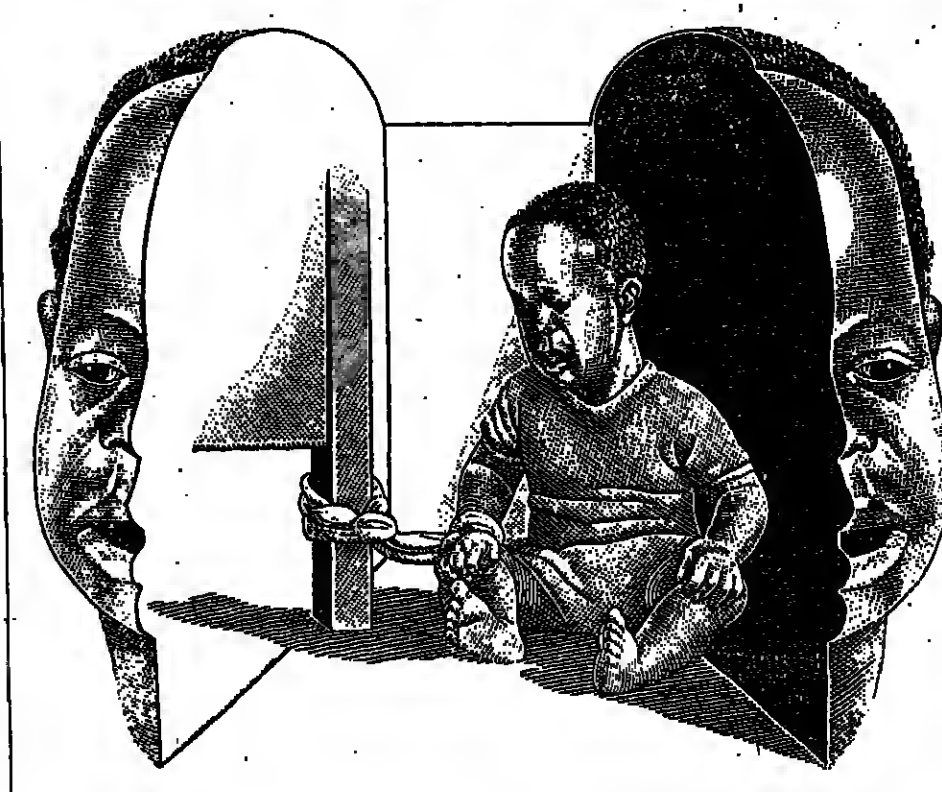
**32/34**

Computers; a/v equipment; RE

**35**

Talkback: teachers' skill bank

# Under five and the wrong colour



Bill Sanderson

Barbara Tizard  
argues that existing educational policies  
are failing to meet  
the needs of young children and parents  
from ethnic minority groups

to reach the level of indigenous children in written English.

Unless we want to resort to a hereditary caste of black porters, train guards and other orderlies, we have to make a more effective educational intervention. True, intervention at the pre-school stage cannot inoculate the child against later educational failure. Whatever we do has to be constantly reinforced, but at present we are doing least for the under-fives.

Some authorities—at any rate before the recent cuts in public spending—over-saw tackling this problem by providing the number of part-time nursery class places, running courses for childminders and encouraging childminders to take their charges to nursery schools or play groups. There are several reasons for believing that this policy is totally inadequate.

First, several surveys have shown that the most common form of care is not by childminders, but by husbands or relatives, who are often too exhausted or insufficiently motivated to take a child to and from a half-day nursery class. Second, until we know more about the quality of child-rearing by childminders and the effectiveness of courses in raising their standards, considerable doubt must be felt about recruiting more of them and relying on their services. Third, such a policy offers nothing to the under-threes whose mothers are not working, and whose environment is often overcrowded and inadequate.

Finally, for many children from black or Asian families the usual nursery class regime of educational failure—the children of West Indian mothers, particularly badly at school, and the children of Asians on the average fail

other children, to detach themselves for a while from their mothers and to experiment freely with a wide variety of materials. This type of education works best if there is a back-up from a mother who during the rest of the day is busy explaining and talking to the child. At school there is little opportunity for the one-to-one dialogue which is the special need of children from large or overburdened families.

The provision of experiences for such children is not enough—what they need for intellectual growth is someone who will help them to understand and extract meaning from their experiences. This requires a good deal of individual interaction with an adult. Unless special plans are made, the children who need this interaction most are likely to receive it least.

There is a second reason why the ordinary nursery school regimen does not meet the needs of children from ethnic minorities, even if they come from a family which is not hard pressed. This is their special need for language teaching. Contrary to popular mythology, children do not readily pick up an adequate vocabulary of English simply by mixing with English children.

This may happen in the case of an isolated child, but not when a number of black or Asian children enter school together. Such children tend to stick together, and not to approach adults; yet language is best learnt from adults. Not only do young children have a limited vocabulary to teach to others, but the uses to which they put language at school are often limited. In a free-play group the teacher is not likely to spend long talking to any one child, especially an unrespon-

sive child. Unless some special attempt at language teaching is made, they may emerge from nursery school with little more English than when they started. One approach to the language difficulty would be to take the concept of the multi-racial school seriously. Staff should be recruited who would teach and speak to the children in their native language or dialect, only gradually weaning them, perhaps in the infant school, to English.

The argument in favour of this policy is that the acquisition of a second language may best be delayed until the child has acquired the fundamental linguistic-cognitive structure in his first language. Alternatively, we need to develop techniques for helping the child to acquire a second language at the nursery stage. We don't know which of these strategies is the better and research is urgently needed.

Admittedly, we are always short of teacher-time, but good use could be made of volunteers. Secondary school children are sent to help in playgroups, but the experience tends to be neither satisfying to them nor useful to others because they don't know what to do. If, however, they were given the responsibility of helping one or two children and trained in how to help them, the experience could be particularly useful. Douglas Hubbard has carried out very successful programmes along these lines in Derby-Mount schools, with indigenous English children.

There may also be a pool of adult volunteers in some areas—for example, among women not working, and the retired—who after training could give considerable help in the school. Finally, the children's parents could often be enlisted in the educational process, and could give valuable help if the teacher explained her aims and methods.

Language work in nursery classes is however a partial contribution to the problems of the under-fives in ethnic minority groups. These children's development is dominated by poverty and poor housing and often by the effects of long hours of maternal employment, maternal fatigue and depression.

These are social problems, which require social solutions. It should also be recognized that they have educational implications. All the settings in which the child is reared from whether at home, with the childminder or on the street, it is both learning and being taught skills, knowledge, values, and attitudes. Often this education is inadequate or harmful.

If this point is accepted, then it follows that we have an obligation to provide services to help the family with child-rearing from infancy. It makes no sense for education departments to consider that they are providing for the educational needs of under-fives by setting up nursery classes, while ignoring the education of the under-threes and of children whose mothers work long hours.

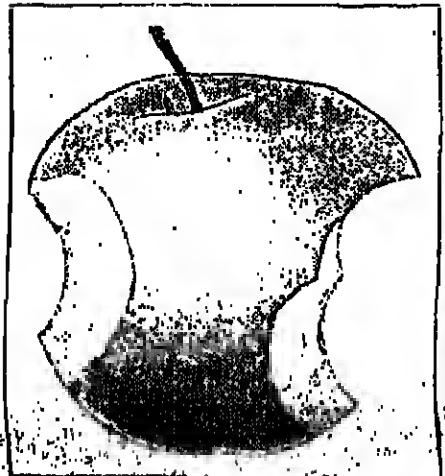
To believe that education is something which only goes on within the school premises is to neglect responsibility for the great bulk of the young child's experiences. In the long run this doesn't pay off, as we see when they arrive at school. For this reason we should surely be working for a unified department, responsible for supporting the family with both care and education services. For the children of working mothers, good quality day-care which is truly educational is needed. There are strong arguments for giving priority to the provision of such services in areas of high immigrant concentration.

With respect to costs, two points must be made: should not part of the contribution which these families are making to the economy be paid back in services to them? And is it not true that we decided as a society that the care and happiness of our young children is a major priority?

Barbara Tizard is Dr Borrada's Senior Research Fellow, Institute of Education, London.



For our feature series on the common curriculum, Maurice Holt suggests some difficulties involved in organising a timetable which provides real choice for all students; and Patrick Eavis shows how one secondary school attempts to keep the options open as long as possible



# What are the real options?

Maurice Holt

Choosing what suits you best is enjoyable and satisfying at any age. In a consumer-orientated, industrial society, we can have lots of fun doing it, provided these alternatives until for our purpose can easily be disposed of first. Any one of 20 kinds of car would do for our pet. But will any one of 10 subjects in an option column do for our fourth-year child in a comprehensive? Are they all equally fit for the purpose of educating him?

He's chosen metalwork because he likes the teacher, and the head of lower school said there'd be room for him. Until last year he used to enjoy science, and now the only science subject he's doing is something called human biology. The school sent his parents a complicated booklet about the options before Christmas last year, and they tried to see as many stuff as possible at the parents' evening, including the careers man. But some of the choices were full, or only suitable for those the school said could get O-level. In the end Gary found out what his friends were doing and he seemed quite happy. And after all he is still doing English and maths, and he likes the school, so it will probably be all right.

There is evidence, however, that these multiple-option schemes are not "all right". The recent survey by the National Foundation for Educational Research, *A Matter of Choice*, found that "around 40 per cent of fourth-formers were either dissatisfied with or indifferent towards their elected subjects; there were marked differences in satisfaction between pupils of different abilities... The dissatisfied children tended to have poorer attendance records... Some 40 per cent were being taught in groups which did not correspond to their capabilities for two or more subjects".

Incredibly, this kind of option system for the 14 to 16 stage has just been endorsed by the Schools Council's working paper 53 on the whole curriculum. This allows the privilege of a balanced curriculum for pupils up to 13, and for "pupils contemplating a

degree of choice in the sixth form". Balance for 14 to 16-year-olds will depend on how lucky they are with their school's planning and teaching courses and in the degree of coordination which is established between them. Whatever that means.

How have most comprehensive got lumbered with these complex option schemes? They are the chief source of timetable inflexibility; trying to make educational sense of them leads to complicated restrictions; they absorb a lot of guidance time; and they are, like all extrinsic choice schemes, costly to staff. The staffing enrichment necessary to run them inevitably comes from pinching in the 11 to 13-year-olds, with classes of 30 or more; the years where learning attitudes are formed and tomorrow's seed sown. It's an awful lot of trouble to go to, and the final irony is that, in spite of the pride each school takes in its own scheme, the choice of subject-patterns taken by fourth and fifth-year students is more remarkable for its similarities than its differences.

The option system has grown up as a makeshift response to the uncertainty about the educational purpose of the comprehensive school, which uneasily combines two separate curriculum styles: the grammar school, with specific subject-centred, syllabus-based goals, reinforced by a coercive, hierarchical management; and the topic-centred approach of the modern school, backed by inductive decision-making. One seeks pupil success (with little regard, incidentally, to curriculum balance) in what it identifies as academic subjects; the other just as confidently confuses instrumental, outward-looking courses with talk of personal development.

Both approaches, however, have class teaching in common. In taking them over, the comprehensive school has adapted them to the whole ability range by the essentially case-teaching-based devices of ability setting and subject options. We accept the difficulties created by the opposing polarities of the

two curriculum styles, because option choice saves our conscience by seeming to blur distinction. In any case, isn't the comprehensive school all about meeting individual needs? So the more subjects we offer, the better?

We came, as we must, to ask ourselves what the comprehensive school is all about. Answering that means making value-judgements. The turgid compromise of working paper 53, despite its organization-man-grams and gratuitous classification, has everywhere and nowhere. The judgement must be made by each individual school, analysing the interaction it has with all aspects of its cultural environment: its teachers, its social milieu and expectations, its religious, its regulating authorities. They will inform and modify the way in which curriculum implements its own view of what an educated person, so that a selection from the culture may be made and each initiated into it.

In a democracy there seems much virtue in the classical concept of a liberal education, leading pupils towards autonomy—the power to make meaningful personal choices by a general education which recognizes the value of the individual mind. The mind develops in distinctive modes of consciousness and experience. If the intellectual and emotional being of our pupils depends on bringing to the inside of mathematics, scientific, religious, moral and aesthetic understanding, to an understanding of themselves and the relationships with others, a comprehensive school charged with compulsorily educating all its pupils in 16 would be failing in its task if it did not attempt to offer such a programme to each of them.

This means seeing the five secondary years of schooling as a continuous concern. Centrally, but not exclusively, society's certain instrumental expectations of schooling access to a foreign language, and

preparation for leisure opportunities through physical activities. Schools must also allow pupils to acquire certain personal and vocational skills if they wish, notably in business studies and individual art and craft subjects. These needs can be met in general by two sets of options in the fourth and fifth years, taking up roughly only 20 per cent of curriculum time.

Getting to this point in the argument will be the result of the professional initiative of head and staff. They will use the work of philosophers of education in identifying knowledge domains, and will negotiate strategies in the light of available resources, political constraints and community factors. Negotiation, though, is not a matter of equally-weighted alternatives. The underpinning of the process, which must be the school's responsibility, is the recognition that some choices are better than others.

This process is not easy, but the next step is certainly harder. Now the ground-plan of intentions, criteria and expected outcomes must be implemented and turned into an organization and a timetable.

Each school's solution will be different, but some elements will be common. A variety of learning approaches will be needed, with much individual and group work. In mathematics, for example, if each student is to obtain mastery of an idea or technique, the system must be simple enough to allow some to take longer, while others move on in more advanced work spiralling round the same idea.

The resources for learning will extend beyond chalk and textbooks: staff will need space and time in each lesson to structure work in a variety of ways. Perfunctory at best, some are likely. Some resources and appropriate equipment will be needed, and not necessarily the centralized, standardised sometimes advocated, which can only complement detailed and careful curriculum planning based on ideas and

hopes, on clichés and kings rather than packages and things. The latter matter, but they don't come first.

In history and the humanities, on the other hand, there will be a place for discussion to which all can contribute. Since our resources must be as accessible to students as possible, forming ability sets or bands seems pointless, useful only if one assumes students can be wrapped up in homogeneous groups to get the same collective treatment. This separatist approach runs counter to that of initiating all pupils into a basic nexus of knowledge and understanding by recognizing the best ways in which they can each learn.

Individualized learning is not the simple answer, either. A much more subtle mix is needed, starting with the relationship between teacher and learner. Teachers are in authority, because they know a bit more about aspects of our culture than students.

Teachers' decisions will be shared, while each enjoys considerable autonomy. Their life in assessing course work, constructing syllabuses, selecting materials and devising learning systems will be more demanding, more complex. But our experience shows it is not without its satisfactions. Checking on the progress of each student becomes a necessity, and the quality between academic and pastoral work will never seem false.

Another result will be interrelated work

between subjects, possibly aided by a faculty structure. In science, for example, there is much to be said for developing a genuinely integrated approach based on concepts like the transfer of energy. The aim, after all, is to promote scientific understanding. Rigid divisions into physics, chemistry and biology may not be particularly helpful. (They certainly play havoc with traditional option schemes; their conflict with languages options is the prime cause of the premature specialization still rife in our schools.) While an association between English, history and geography is profitable in realizing several common aims, the right word is interrelation, rather than integration.

Take for example urbanization, which is a main area of work in our fifth-year humanities. Each group of specialists can profit from looking at it in different ways. There are the origins and effects of the Industrial Revolution; the validity of models for urban settlement; the response of the artist to changing influences; and man's responsibility in the future for urban and regional planning. Furthermore, the needs of the whole ability range can be met. One student can investigate the growth of canal systems while another studies the social effects of new forms of transport.

Both are being initiated in ways the teacher has established from discussions with

the humanities faculty and in accordance with the school's broad strategies. They will penetrate to different depths, but neither will be denied an encounter with an important topic. No streaming at setting is needed, but a parallel Mode 3 O level operation will be essential, with, in our case, half the marks going on course work. In subjects like mathematics and science, an element of setting between O level and CSE by self-selection may be needed. Generally this can be left until the fifth year.

We find no signs of alienation because of this. Our pupils receive a coherent set of signals about the hopes we share for all of them because of the team-taught, non-streamed faculty structure, reinforced by year-tutors and the weekly meetings of the school forums. They are introduced to the idea of choice from the beginning: choice not between ill-understood subjects, based on premature assessments of possible jobs or careers, but between different ways of approaching a new set of ideas, worked out on the spot with the staff concerned, and reflecting the changing talents and moods of the student through week, term and year. This makes sense of choice, and we could not do without it.

Sherodes School has pursued these lines since its establishment with first-year pupils in 1969. Now it is fully developed to the tenth-year sixth, there is no evidence that pupils or parents think it is a parental-choice area, dislike non-streamed general education. In fact, the results show an extensive engagement with the content of the curriculum across the ability range. We have used Schools Council and other project materials where appropriate, but always modified to meet our own requirements. In schools as in other choice-oriented experiments, our own brands are the best value.

Maurice Holt is headmaster of Sherodes School, Huddersdon, West Yorkshire.

## Getting the balance right

Patrick Eavis

When I see the difficulties that face us in the classroom, I wonder about the relevance of the perpetual discussion on education.

Although at Manor Park we are already broadening our curriculum along the line now suggested by the Schools Council working paper on the whole curriculum, curriculum development per se is only part of the answer to the malaise in secondary schools.

A large number of pupils are bored out of their minds. They cannot see the point of much of what we expect them to do, it is true, but the origins of absenteeism, poor motivation and disorder that are the ever-present testimonies to our failure cannot be explained by the content of the curriculum alone. A discussion of the common curriculum and its close relative, mixed ability teaching, is not the only, and may not even be the most pressing, need at the moment. The malaise may be less affected by the resolution of this debate than by the more direct measures, such as more examinations and more vocational or "relevant" courses, are unlikely to be successful.

While the average national attainment is around grade 4 CSE, most pupils will have to accept that education cannot be a means to an end in any career. Whereas the more able can swallow any curriculum (academic, mixed, selective, stream, or however it is served) in the hope of greater things to come, for most there is as such hope. Many swallow it reluctantly or not at all. So even when the question surrounding the common curriculum, which many see as the logical extension of the comprehensive ideal, are resolved, the basic difficulty of switching on the interests of most of our pupils remains.

And the solution to that, first of all, depends on the achievement of far more pedestrian methodological aims.

Predominant among these is the need to maintain sufficient calm and order in schools to give anything a chance to operate. We need to be able to support the teacher, particularly the inexperienced, in this and in other ways, too. Many teachers have lost their sense of direction, not because they are unsure of curriculum aims, but because the difficulties of control without repression and of the organization of the resources needed to teach wider ability ranges are too great. In such a situation the unrest inherent in the lives of so many of our pupils is compounded.

Perhaps we have set our sights too low, but I am sure that we were right to set out by tackling difficulties such as these at Manor Park, and that this has contributed to the improvements in the lower school that staff are beginning to report. For the 11 to 13-year-olds we are trying to reduce the number of teachers teaching each child to provide greater stability; to cut down on the clamour of period changing every 35 minutes that adds to the phreneticism of their daily lives. In this way, we have tried to build a bridge between primary and secondary school.

Throughout the school we are pushing for a commonly accepted code of behaviour and trying to inculcate a sense of joint responsibility. To get greater involvement and interest from our pupils we are trying to improve our teaching, working from a fairly traditional base in terms of content but being fairly adventurous in method. Team teaching

is helping us to do this. With mixed ability teaching it is no longer feasible to prepare the lesson in the corridor on the way to the classroom. It requires commitment and preparation. Working in a team, all teachers to produce good resources for the class collectively. It also allows them to draw on each other's special expertise and, as teachers, is committed, supported by and supporting the others.

We try to get pupils out of school as much as possible and to make imaginative use of students. To a large extent, we have broken down the traditional notion of teaching periods and may have as many as 12 subjects at one time working as a team, producing teaching materials and trying them out as pupils.

As to what we teach, it does not matter much what it is as long as we are stretching pupils; as long as they are enjoying it and improving their basic skills; and as long as we are keeping as many possibilities open as long as possible by giving them the opportunity to learn something from all our different forms of knowledge.

But there are no absolutes in educational theory or practice. As the Schools Council working paper makes clear, schools are the centre of educational development and every school has to work on its own unique way of life every school, in its own environment, buildings, local authority and examination system.

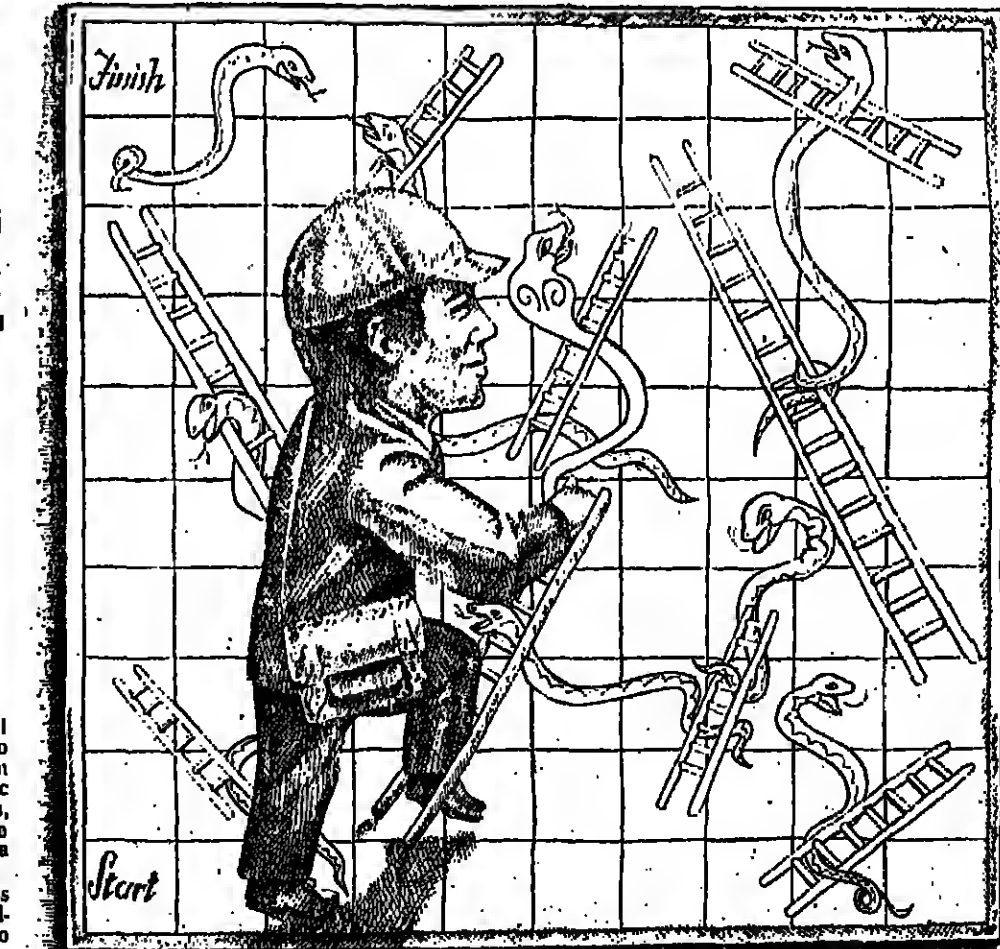
Thankfully, it is becoming less difficult to persuade teachers to adopt a common curriculum in the first three years of secondary education, but beyond that there are difficulties. I would not argue anyway that an

curriculum for 13 to 16 ought to mean all pupils studying exactly the same topics. So while for 11 to 13 we have a broad common curriculum, with pupils covering the same topics but some at greater depth than others, for 13 to 16 we have a balanced curriculum, a variety of activities from which all pupils make limited choices (see table).

The Schools Council working paper argues that fourth and fifth years should have been given and chosen in their curriculum. The two are not always compatible, and most adolescents are not too easily convinced of the value of a balanced curriculum. Our scheme does not attempt to compromise between the two. All pupils must choose one course from each of the broad subject categories of English, maths, science, and creative arts. In humanities they have to choose two courses.

As everyone has to do some mathematics, we have 10 level maths, computer with maths, or creative arts, or our Mode 3 maths course. Every pupil has to do something that is not too academically, though not too much so, for staff agree with this. At present we do not offer enough alternatives within each broad category, but that is one of the things we hope for. The exception is in creative arts, where pupils can choose between art, metalwork, woodwork, pottery, graphics, vehicle technology, home economics, and needlework.

Two further options groups offer the choice of two languages, a second or third choice of arts and science subjects. In some subjects, the options may be fairly directive. In the case of the physics, chemistry or biology, for instance, pupils may be steered into the



loss demanding science-related studies. And not all teaching is in mixed ability groups—groups in mathematics, for instance, are streamed.

The thoroughgoing advocates of mixed ability will object to these kinds of streaming. Likewise the common curriculum exponent will criticize the relegation of languages to full option status. But while not wishing to erode the equal opportunity offered by a comprehensive system of education, there are certain practical constraints. Mixed ability teaching is only successful where the teachers are committed and supported by massive resources for individualized learning. Where neither of these conditions operate, it would be futile to introduce it.

As for compelling all students to take modern languages, this is not always possible because of the way languages are learnt. Every child may be capable of learning a second language, as many children are in the bilingual. There is all the difference in the world between learning a language in a natural environment and learning it in the classroom, in a structured sequence in which

what you learn today relies on you having grasped what you learnt yesterday. This is more difficult if, like many of our pupils, you come from a home that is totally unresponsive of learning a foreign language.

Neither are these homes always conducive to learning such things as history. At least there is some chance of making contact with a pupil's own experience; and learning is not dependent on the consistent accumulation of subject matter in quite the same way. But even history is not a common, mixed ability course. Pupils either opt for history O level/CSE or follow the humanities Mode 3 course, looking at contemporary issues from a historical viewpoint.

What is common is that both involve the historical way of thinking and method of study—common concepts, not information. A common course would require a new syllabus, like the Associated Examining Board's world history, with its open-ended choice of topics and assessment that includes opportunities for pupils to write through an oral examination. Either that, or the total abolition of examinations at 16 to enable secondary education to

make the sort of progress primary schools have made in the past 20 years, and particularly since the abolition of the 11-plus.

The important thing is to keep opportunities open to every pupil. To do less is to sell them short. This means teaching them something of what we know and enjoy. If socialization is all that schools are about, we might as well close them down and turn them over to youth clubs.

Patrick Eavis is headmaster of Manor Park School, Newcastle-upon-Tyne.

Years 1 to 3 Common syllabus for all in:	
French	
Mathematics	
Combined science	
Humanities (history, geography, English, RE)	
Drama	
Music	
Creative arts (half a term each of cookery, woodwork, metalwork, two- and three-dimensional art, etc.)	
Years 4 and 5 Balanced curriculum	
All choose one course from broad categories:	Plus two more options from:
English	Two languages
Mathematics	A second or third science
Science	A second or third art
Humanities	History
Creative arts	Accounting
Guidance	Commerce

John C. 116



A lot of learning that takes place outside the classroom occurs in the games children play. Pat Palmer shows how one primary school made use of this traditional folk art.



## Rhyme, rhythm and song

Playground duty is nobody's idea of fun. Yet it is probably the only time we can dig for the half-buried treasure of children's traditional culture. Sometimes, for physical, educational, or socio-economic reasons, the playground is not a suitable environment for playing traditional games. And, to the less observant or sceptical, children's culture has gone the way of most other folk culture. However, if we look more carefully, small groups may be seen playing as children have played for years, using rhymes, songs and dances to enhance the games.

On cold mornings girls in twos or threes are enough players, in small circles, do one of their favourite clapping rhymes, "Who stole the cookie from the baker's shop?" The intricate pattern of claps, underarm and overarm, accompanies the matter, which is a satisfying mixture of solo and group voices with quick wit and counting, requiring a fair degree of coordination. They probably know at least a dozen of these "claps".

If we show interest they will probably demonstrate singing games like "A sailor went to sea" or "Going to the countryside". During my playground duties, I asked whether they knew "Monday night, down the lane, Tuesday night, back again", a singing game I'd noticed in another school some six miles away. When they answered "no", I realized that area differences in games might be an interesting piece of work in a school environmental studies project. I suggested a collection of games to other schools.

Most heads were sceptical. "What was the educational value?" "Children no longer play traditional games." The games they play have been taught to them by infant schools or by girl guides and brownie leaders. The thought of a brownie leader teaching about the significance of claps in her hair, going "humberacha" with suitable hip movements in one game, caused me some amusement.

Four schools finally decided to help in the collection of material. Under the suggested headings: claps, dips, singing dances, circle games, line games, ball games and skipping games (particularly those using rhymes) and others.

The main aspects which interested me were the music, the language, the movement and dance. I sent the list of the games including these features played at our school and asked teachers at the contributing schools to mark the ones they had observed and to add other titles. I suggested there should be no interference with the oral transmission, and so texts were not written down.

A date for a festival/party at which games could be demonstrated and exchanged was fixed. After examination of the material, I compiled a programme, which was not printed

or circulated, lest the temptation to rehearse was too great. As 39 titles were submitted, it was a difficult task to choose items to be performed. I decided on a mixture of those known in several schools, or in all schools, and those known in only one school, so that critical observation and discovery could be encouraged.

During the collection of material children came and showed me all kinds of dances and songs, including, rather depressing examples learnt at private formal dancing classes. Eventually many realized that our collection was to be of their own traditional songs. Few of the old classics were collected, with the exception of "Three came a gipsy riding", "The big ship sails" and some skipping games with songs and chants. However, new children's favourites are entering, and they are undoubtedly traditional in form and content.

Two half-hour sessions of practice with the junior choir were used to help compile and demonstrate games. Helpers were chosen by the time-honoured children's method of dipping. I prepared a chart showing the complete list of games, with contributing schools represented in different coloured discs: on separate charts for each school were noted items that only individual schools knew. The lead of the art department produced life-size paper cutouts of boys and girls, made by his own class, and these were mounted as a backdrop to the games.

Only two other schools were able to attend the festival. The visitors were allowed to run about the hall freely. They seemed delighted with the wall of paper children, and examined the man and charts with great interest. They were allowed five or 10 minutes to talk to one another and to feel the discs.

The programme started with the clapping game, "A sailor went to sea", as this was listed by all schools. In this first item an variation was noted, but this caused little disturbance in performance. However, in the second item there was so much variation that schools were encouraged to show and watch different versions. This happened quite frequently during the clapping, circle and line games that formed the first half of the programme. Some items, however, were demonstrated by two groups simultaneously.

When games or songs known only to one school were shown the other children watched with critical understanding and interest, just as would any expert audience watching performances in a style with which they were familiar. This was children's culture and they were in their own element. They applauded the skill and inventiveness, the humour and liveliness of songs and dances. One school, in particular, had a distinctive style of move-

ment known only in that area. Little organization was necessary. Schools were asked "Please show us..." and a leading singer or chanter always emerged—there was little shyness or reticence. The children were confident in their own culture. The time, however, was utterly inadequate. During the break for refreshments the visiting children said "Please, are we doing nurse games?"

The teachers marvelled at the children's material and performance: the skill and coordination, the inventiveness and humour, the love of language and the immense enthusiasm. Meanwhile in the playground the children continued their games. Circles and groups of girls doing games attested to the success of the occasion.

Most of the boys played football. By the third year boys stop playing singing games. However, many second-year boys continue to join in occasionally, and they still enjoy watching the girls play.

When the programme resumed, skipping and ball games were shown. A diversity of skills and careful matching of language and movement was observed. Time quickly ran out. One school had to leave for a basketball match. The children were reluctant to go and anxious to visit us again. It was impossible to choose a game that everyone knew to finish with. I decided to teach a simple French-line game, so all could join in on equal terms. The long line twirled round the hall and corridor and the children sang at the tops of their voices. The festival had been successful and worth while.

It is difficult to record the enthusiasm as well as the variety and vivacity of the children's performance. A film would be a more suitable medium. We had made a tape-recording and taken colour photographs which cannot show the blend of singing or chanting, movement, mime and dance which is the children's art form.

This performance was as interesting and entertaining as other forms of traditional culture. As the early stages of our project showed, many teachers are unaware that under their noses a lively, ever-renewing folk art is still alive, that helps children to learn to understand and to grow up in the complex society that we have made. Through the ritual of their games they show respect for social conventions and responsibilities.

In our school, which is multi-racial, all the children assimilate the games and play them at some time in their school lives. Through the skills needed for the games they learn movements of hands and body, feet and legs. They also develop a most surprising memory for a large repertoire of chants, songs and rhymes, and mainly, one assumes, by the

strong rhythmic component which is reinforced by physical movement. The show developing skills in language and manipulation with obvious delight. "Black bobble, black bobble..." "A sailor went to sea, sea, sea. To see what he could see."

Some of the singing games show a turning and at others reassurance. The tunes of primary school roles and games, as shown in "When Snow-bell, black bobble..." which traces the black-bobbling, is touching in its simplicity, the witness of humour in the reference to the figures of the time, like the old and George, Best, shows the good sense and the recognition of the "carriage ride" in "Going to the countryside". Children's intuitive observation.

The fairness of the dip compared favourably with many systems of choice. Teachers and other adults who avoided humiliating children, the dislike anthropological references. It is tempting in acceptance of the skill rather than in acceptance of the scissor jumping used in "Ox-Cart Chinaman", the primitive Chinese strength or skill for tribal legends. Dangerous in speculation too, which origins, as games are being changed and up continually. However, what is clear is that children of this age need some practice emphasizing individuality and the sense of the children's social responsibility. Children also enjoy combining rhyme, dance, music and clapping. When looking at the well-disciplined choir of young children, it is not surprising to find that they suppress the natural overabundance of response to music. The children's games also show a love of coordination, a fairly small muscular movement, the disciplined skills would surprise an education specialist.

Children's singing games and similar tunes have a strict form. The rhymes and songs are lively and clear. Repetition and variation do not preclude variety and interest throughout the repertoire. If children are to understand and to grow up in the complex society that we have made, through the ritual of their games they show respect for social conventions and responsibilities.

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Put Palmer teaches in the junior department of the Heath Primary School, Bury.

# Justice for the judges?

Lord Hailsham reviews two new books on crime and society in the eighteenth century

Albion's Fatal Tree. By Douglas Hay, Peter Linebaugh and E. P. Thompson. £7.50. 0 7139 0975 7

Whigs and Hunters. By E. P. Thompson. £6.50. 0 7139 0991 9. Allen Lane

It seems to have become a fashion to dory the eighteenth century. It is easy enough to do this if we apply to the doings of our successors the ideologies or standards of either the nineteenth or twentieth centuries. Indeed there is much for which no excuse can be made or offered. There can be no defence of the brutalities after Gulliden, the savage evictions accompanying the Highland clearances, the uncompensated loss of customary rights in the English enclosures, the condition of the poor before the advent of social security, the lawlessness in the absence of an organized police force or an incorrupt and centrally controlled civil service, the savage penal code, the sleazy subculture revealed in *The Beggar's Opera* or Boswell's *Early Diaries*, the scandal disclosed by Jonathan Wild's conviction, the hypocrisy and smugness of members of the so-called Venetian oligarchy or their political corruption.

One can go on forever, and equally pointlessly. One may also admit as candidly that much of this is *scandalous* and make very pleasant and interesting reading for a wet afternoon. But how far is it really history as history deserves to be written for an educated public?

For there is another side to the coin. The century began with a Britain quarrelsome, divided, ruled by an unacceptable dynasty and suffering from a groggy currency. Until Marlborough's victories, Britain was even the pensioner of France. Even if we prolong the century till 1815, the unreformed Parliament, we ended up a confident, basically united country, which, although it now faced new powers, had the social solidarity and military know-how to withstand and defeat revolutionary and Napoleonic France, and had protected itself with a legal system which, for all its faults and limitations, proved capable of survival throughout the North American subcontinent and was in process of being transplanted to India and Australia.

Above all, and with all the weaknesses in her social system, Britain had become possessed of a constitutional and political maturity and economic strength which proved sufficient, both then and afterwards, to absorb without civil war the Revolution and the coming reforms of the eighteenth century. No assessment of the eighteenth century can be called fair which does not candidly acknowledge these achievements and the contrast they make with those of any governing class on the Continent.

These two books require to be reviewed together since the second, E. P. Thompson's *Whigs and Hunters*, was originally designed as an extra chapter for the first, the composite *Albion's Fatal Tree*. Both are the offspring of the Centre for the Study of Social History at the University of Warwick. Both are, to quote the author centrally concerned with the law and the eighteenth century's definition of crime. Both are concerned with England and English law: to the exclusion of Scotland.

*Albion's Fatal Tree* is written round the story of the Tyburn Riots, the smugglers in Sussex, Kent and Hampshire, the abolition of the practice of wrecking as practised in coastal districts, particularly in the West and South, the art of poaching in

Connock Chase, and the practice of writing anonymous and blackmailing letters in support of social grievance which, did the authors but know, persists fairly vigorously up to the present.

*Whigs and Hunters* revolves round the history of the so-called "Black Act" of 1723, introduced at first to deal with the gangs of disguised and armed poachers who practised in and around Windsor Forest and Hampshire and pillored both Royal and private parks, fishponds and forests. Though I would have welcomed chapters on the Gordon Riots and on Luddism and the Enclosures at or after the close of the century, both books are worth reading and both present new and interesting facts. Neither gives an acceptably balanced picture either of the jurisprudence or ideology of the period.

From the lawyer's point of view, the eighteenth century may be said to commence with the Chief Justiceship of Holt and to last until the end of Lyndhurst's first period as Lord Chancellor at the close of 1830. Clearly, of course, the law of that era was based on the social system of the day. Civil law was largely concerned with property, though the law of contract was fast developing. The penal code was savage, and one of the strange achievements of the eighteenth-century Parliament was to add a whole clutch of new offences to the criminal law, bolstered by a series of excessive punishments and repressive penal procedures. With non-custodial penal treatment a thing of the future, and prisons nothing better than insanitary cages largely containing prisoners awaiting trial and fines, with prosecutions largely in the hands of private individuals and informers, no organized police force, and witnesses often consisting of accomplices bribed to turn King's evidence, and with soldiers the only means of keeping order, Parliament and lawyers were left to struggle as best they could with the

melancholy alternative punishments of the gallows, the pillory and transportation, with fines for those who could pay them and imprisonment for those who could not.

In short, they often had to choose between the brutalizing and the ineffective. In the outcome they did much to mitigate the harshness of the scene by personal humanity, the use of the prerogative and rules designed for the protection of an unrepresented accused.

In truth and in fact the age was one of steady progress even on the criminal side. Despite the growing number of offences, the theoretical savagery of the code, and the constant increase in the population, actual executions declined to about a quarter of the level at which they had stood a century before. Moreover, this was the age which first gave us many aspects of the modern English criminal trial as we now know it, the burden of proof resting firmly on the Crown, the exclusion of hearsay evidence, the requirement for corroboration in the case of accomplices turned King's evidence, the necessity for guilty intention as an essential ingredient in crime, and the exclusion of extorted confessions, to name only a few examples. It was the age of the growing maturity of Equity under Hardwicke and Eldon, and of commercial law under Mansfield (in spite of the failure of his brave attempt to get rid of the doctrine of consideration). It was the age when international and maritime law began to flourish under Stowell, and when Blackstone prematurely introduced the academic study of law to somnolent eighteenth-century Oxford.

The judges (whose private lives were rather more open to reproach than would be acceptable today) were far more humane and much more just than their predecessors of Stuart times, and, so far as we know, apart from the Macclesfield scandal, almost all totally incorrupt. They were, of course, moiré appointed by politicians, often as the reward for

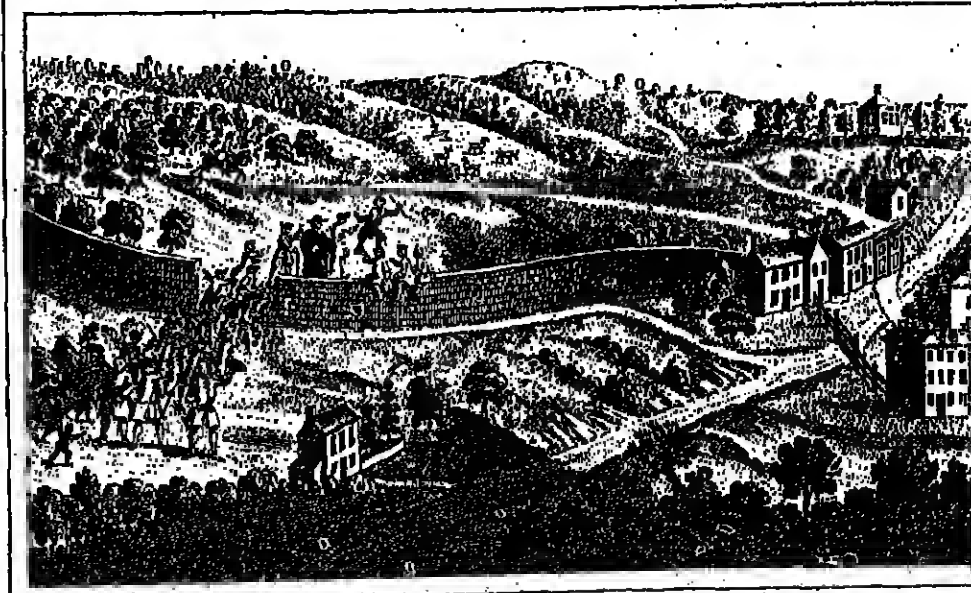
political services, and much more susceptible than their successors to a political approach, or even political interference. But they were infinitely less vulnerable to this than their predecessors, and, by and large, they applied the law impartially as it was then understood. I doubt whether Erskine could have obtained his famous acquittals under Jeffreys, Scroggs or Scroggs or maintained his courageous independence of the Bench. Though there was the odd hanging judge, like Puge, he was exceptional and only a pale reflexion of the Stuart judges. Against him must be set Romilly (though he was not a judge), Foster, and, pace Mr Thompson, Holt, Hardwicke and Mansfield. Viewed as a body, they left the tradition of the rule of law firmly established where they found it precarious, primitive and uncertain. And, in the wings, stood Jeremy Bentham, barrister of Lincoln's Inn, the first real swallow in the summer of law reform.

I would not have mentioned any of this if the authors had simply stuck to their last and gone into the interesting details of the research they have carried out. Unfortunately, they lay claim in their preface to a concern with law both as ideology and as actuality and the authors stand to be judged not merely by the factual accuracy of the incidents their researches have brought to light, but by the breadth, depth and balance of their appreciation of the law and society as it really stood.

By this standard, they must be judged to fail. By far the worst offender in this respect is Mr Thompson himself. His contemptuous treatment of Hardwicke and Mansfield is really inexcusable and a sordid and unjust, so much so that even the irrepressible Lord Campbell shines like a beacon light in comparison. These two judges were among the greatest lawyers of their day in this or any other European country. They deserve something better than to be treated solely as if their contribution to the jurisprudence of their age was altogether negligible and confined to the criminal law, or to be made the subject of cheap sneers as if their decisions, if not actually corrupt, were mainly inspired by their class attitudes.

The truth of course is that, even compared with our own, the eighteenth century was a brutal and corrupt age, but the tendency was towards enlightenment, financial integrity and the purity and integrity of moral standards.

This the authors fail to appreciate, and the reason appears to be that they have chosen to blinker their vision by a Marxist ideology. Lurking behind only part of the truth. The actuality and ideology of law, with which they claim to be centrally concerned, cannot be studied by a concentration on the gallows and social grievances alone, or even on crime generally. Incidentally, and appalling personally, I could have done without yet another reproduction of Hogarth's brilliant caricature of the Court of Common Pleas (familiar to all readers of *Private Eye*) and, if he was under instruction to reproduce it in colour on the jacket, the artist could be recommended to make a visit to Ede and Ravenscroft in Chancery Lane, where he would discover that the colour of ermine as it appears on the judges' cuffs, cape and mantle is white and not, as he has painted it, brown nor scarlet.



Parishioners, led by their vicar, beat the bounds of their parish and assert their right of way into Richmond Park by breaking down the wall.











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## 32 Resources



## Careers by computer

by Catherine Arent

The survey of careers education and guidance undertaken by HMI, together with the recognition of the contribution of technology to education and the need for greater professionalism in the area of pupil guidance, has drawn attention to experiments in the use of computerized guidance systems.

Leicestershire introduced its CASCAID system several years ago and it is no secret among careers workers that Cheshire has been experimenting with the IBM United Kingdom company in a project of which two reports have recently been published: *The IBM/Cheshire Interactive Careers Guidance Project: An Independent Review*, by A. G. Watts of CRAC; and *Interactive Careers Guidance System: Final Report of the IBM/Cheshire Project*, by A. M. Butler and M. W. Dowsey.

Michael Dowsey, an IBM research worker and Alan Butler, a senior careers officer attached to the project by Cheshire Education Committee, have reported on their work in devising the system and operating it experimentally in three Cheshire Schools. Tony Watts' report represents a first evaluation from an outsider with the intention of recommending possible improvements before the system is recommended for universal application.

Dr Dowsey studied some of the American systems which gave high school students access to a data bank of information on education and careers with which they could interact to assess their own potential for success or happiness in various occupations for which their qualifications made them eligible.

There has been controversy in the United States about the possible dangers of students having easy unsupervised access to computerized guidance systems which would, perhaps, eliminate the need for counselling. But the opposite proved to be the case. Students who have been able to use these sophisticated systems have also, in general, sought more assistance from the school counselling services.

This does not mean that all who have used the system have been

of their own. Some feel that the teenage student is not knowledgeable enough about occupations to be able to select those for further study from a bank of perhaps 300. Others fear that the effect might be too mechanistic, and there is the danger that systematized methods of guidance can be harmful to young people who have nurtured unusual ambitions or wait to enter esoteric occupations, information on which will not be in the system.

Nevertheless anyone who has operated the IBM/Cheshire system must feel that something of this kind ought to be developed for much wider application. It is most effective in inducing a greater sense of the importance of careers guidance, not only in the young people themselves but in their parents and teachers.

The Butler-Dowsey report describes the objectives which have been laid down and the particular system employed to achieve them. They describe the setting up of the visual display units and print-out equipment in the three schools, which were linked by a telephone line to a computer. In one school the system was supervised by a careers officer, in the others by careers teachers.

The objective was not merely to provide pupils with access to a bank of data on occupations but also to help them to assess their own ideas about life satisfaction as well as the more straightforward assessment of their academic and personal qualifications. The ICGS allows the pupil to enter comparatively sophisticated information about himself and a log of the extent of his "discussions" with the data bank.

In addition, information is so stored that the student can have access to particular groups of careers, individual occupations and can compare one with another on a variety of parameters based upon his assessment of his own interests, abilities and any possible physical characteristics.

The information on careers has been grouped into six levels on Ro's classification and many people would probably agree with Tony Watts that it would have been better to have used the four common levels of occupation: broadly corresponding to technologist, technician, craftsman and operative.

The ten categories of interests: scientific, social, service, literary, practical, etc. are familiar to pupils and teachers from the Signpost cards; in addition, the system contains subjective factors related to job-satisfaction and frustration experienced in various jobs under the heading of "interests" familiarized by the SPEEDCO system evolved at Leeds University.

Experimental work inevitably tends to be undertaken speedily and while one accepts the basic material used for the ICGS, many people would feel that it requires considerable development and refinement. Tony Watts' report recommends a variety of extensions which would make the system more practical.

I agree that the data on the occupations needs considerable refinement, and if one accepts that 296 is a sufficient number of occupations to cover the needs of most pupils. In some areas where there are large numbers of school-leavers, modifications would almost certainly be needed and there is a danger in the computer acceptance of the inaccuracies, some of which are pinpointed by Watts, are removed.

I found it odd that the one entry for teacher apparently comprises the whole range from university dons to nursery school teachers, with fewer than three separate types of accountancy can be thrown up by the bank.

Nonetheless there will be general welcome for these two reports which can be obtained from the UK Science Centre at IBM, Neville Road, Peterlee, Co Durham, or the report sent shown in developing careers guidance by more sophisticated and scientific methods, the greater the chance that it will attract the necessary resources to increase its effectiveness in our secondary schools.

● Above: Children in a Cheshire school using a video display unit as part of the careers guidance project.

## On the trail of software

The National Computing Centre is currently undertaking a study of the use and exchange of educational computing software on behalf of the National Development Programme in Computer Assisted Learning.

J. J. TURNBULL of the NCC criticises the background to the study.

A teacher or administrator wondering what sort of computer software is available usually has to ask a general question—how can I find out what is available? Is the answer in the background to the study?

Unfortunately few agencies maintain indexes, though the software lists published by the Information Centre for Computing in Secondary Education and the work of the Association of Computer Users in Higher Education are worth mentioning.

Ideally the user would want to obtain already developed material rather than develop his own. This will mean transferring to his own environment a "package" of programmes, instructions on how to use them, and teaching materials.

The question of whether software can be transferred to a user's own computer system has been considered by several organizations, including the NCC and the National Development Programme in Computer Assisted Learning.

Both organizations have prepared guidelines which are concerned with ensuring that software is transferred in a way which does not cause difficulties in the user's own system.

So far there has been no attempt at evaluation. Instead, users have to rely on word of mouth and a particular project is worth using. Among the organizations which have attempted evaluation are the Schools Council, the Curriculum Project, and the National Development Programme.

The author discusses, with understanding and sympathy, various aspects of the transfer of software. He points out that the transfer of software is not a simple matter and that it is often difficult to find out what is available.

There is no doubt that the transfer of software is a complex task and that it is often difficult to find out what is available. The author discusses, with understanding and sympathy, various aspects of the transfer of software.

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## 33 Resources/Audio-Visual

ERNEST MILLINGTON and CHRIS MORGAN review audio-visual equipment

## Simplifying synchronization

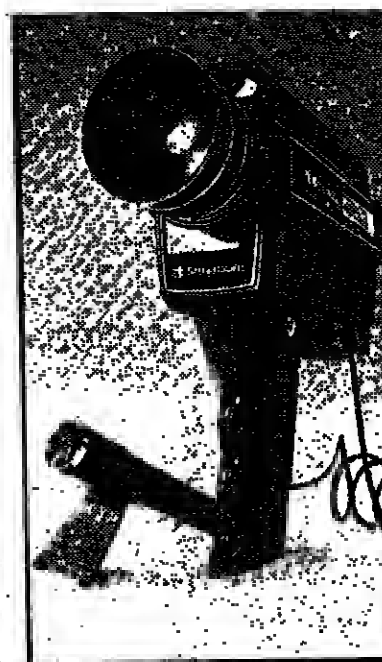
Bell and Howell 1230 Filmosonic XL sound movie camera with two 8mm zoom lens. Designed by Bell & Howell A.V. Ltd, Alpers Road, Wembley, Middlesex HA9 1EG. Price £195.20.

Children are now so familiar with television that they can be highly critical of the less than perfect sound-film synchronization that so often results from amateur film making. Recent developments in the Bell & Howell Filmosonic XL sound movie camera have gone a long way towards simplifying the production of exact synchronization.

The unit consists of a Super 8 camera with an 8.524mm manual zoom lens. Because of the wide aperture of f/1.3 it is possible to operate the camera in ordinary room lighting when necessary without the use of extra light. Exposure is set by a CAS meter and the operator is warned that the lighting is getting low by a red warning light in the viewfinder. The ingenious Bell & Howell Focus-Matic system, which

focuses the camera at the subject and then reads out the setting on the distance scale, makes focusing simple.

The sound recording system is built into the camera and the only obvious external sign of its presence is the microphone, which is supplied with a useful length of lead. This makes for a compact piece of equipment.



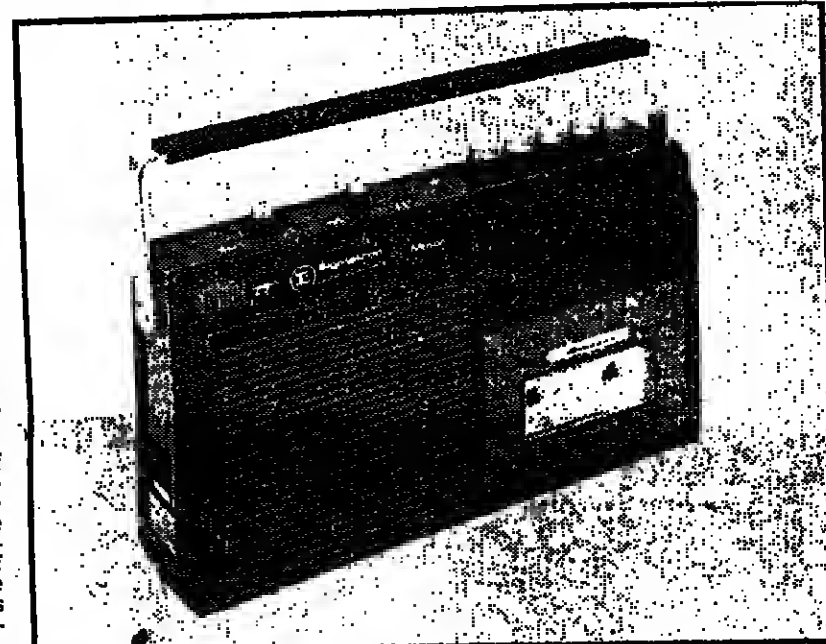
check the light and sound levels, and focus the eyepiece and lens. In practice this only takes a few seconds and the children who used our model soon found it as easy as operating an ordinary cassette tape-recorder. Indeed they were probably less frightened of the equipment than were some of their teachers. They became proficient at conducting interviews which had a surprisingly professional air since the lip synchronization is so precise.

Conducted "Filmosonic tours" of a district seem so much more lifelike than the conventional movie film. When making a film for a town trail, for instance, the Filmosonic provides the ideal way of including the sounds as well as the sights. The children themselves were experts at detecting interesting noises and their sources.

One of the few drawbacks to this camera is the lack of single-frame facility. When using ordinary non-sound film it would be useful if the equipment could be used for animation work. Schools will have to decide whether they are ever likely to make animated films and if so they will obviously have to decide between an ordinary camera and one specifically designed for sound-on-film.

If they opt for sound-on-film the Filmosonic XL is well worth considering. An added advantage over other comparable cameras is that the inevitable silent period at the start of each shot is reduced to an absolute minimum.

Ernest Millington and Chris Morgan work at the Newham Teachers' Centre.



Signatron 'Minor' tape/slide synchronizer. Signatron Audio-Visual Ltd, Woodman Works, Durnsford Road, Wimbledon, London SW19 8DR. Price £65 plus VAT.

The "Minor" has been designed for those who want to prepare tape/slide programmes and retain the facility of a portable recorder for easy transport and normal outside use.

The complete equipment is made up of a battery/mains recorder with two connecting leads. To operate it one simply plugs in the pink button "pulse" lead, and the machine is ready to record synchronizing pulses. Any slide projector can be operated by plugging in the projector control lead and removing the pulse lead. The tape/slide synchronizer is then perfectly synchronized and ready to play.

Unfortunately the rewind is comparatively slow and has no automatic cut-off. It is also less than satisfactory that the fast forward wind has to be held in position. The "hand pulser" appears to be fragile. The worst fault, however, lies in the fact that there is no visual indication that the mains are switched on. Finally, the volume seems inadequate for a large room. An amplifier would be needed.

On the credit side the machine is so compact and smart little set. The automatic cut-off on the end of the recording period is precise. The quality of the sound recording is good and, one of the machine's best features, the controls are straight forward and easy to find and operate.

## Accessories, aids or light relief

Resources and the Teacher. By Tony Gibson. Pitman Education Library. Cased edition: £2.80 0 273 3612 8. Paperback: £1.50 0 273 3612 5.

The author discusses, with understanding and sympathy, various aspects of the transfer of software. He points out that the transfer of software is not a simple matter and that it is often difficult to find out what is available.

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It is an academic book, drawing largely on research carried out by the author at Goldsmiths College, where he was head of the Audio-Visual Education and Television Centre, and with students and teachers in a number of colleges and institutes of education. All the ideas described in detail have been tried out in classrooms. The practical suggestions are clear and precise and could be readily adopted for use by any teacher with his mind open to suggestion and help.

Yet the book would probably not impress teachers at all levels of the school system. Any head of a primary school would certainly find much of it irrelevant and unhelpful. Secondary teachers, however, would need to be well along the path towards IDE or integrated studies to make the most of the book. Many of the ideas might seem impossible if not positively undesirable, in their own situation.

The book deserves to be in every staffroom library. It is packed not only with tested suggestions for action, but with a wealth of references to areas of education which have, so far, been rather sparsely written-up.

Ernest Millington

## Directory

A directory of illustrative material to support technological topics in subjects such as history and geography as well as physics, chemistry and craft and design has been compiled by Dr C. J. Pratt, lecturer in civil and structural engineering at Trent Polytechnic, Nottingham.

It is published by the National Centre for School Technology and the Standing Conference on Schools' Science and Technology, which is developing a comprehensive computerized bank for school technology. The directory comes in the form of photocopied computer print-out.

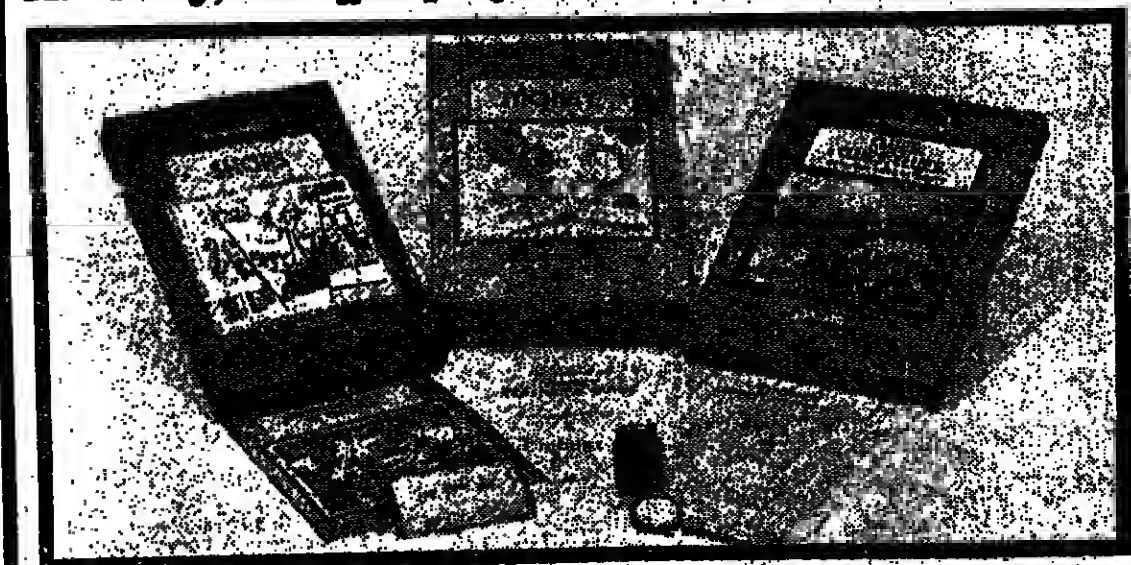
It covers such material as books, leaflets and audio-visual aids. About 1,600 entries are grouped under 75 headings.

The directory costs 25p, post free. The directory costs 25p, post free. The directory costs 25p, post free.

Published by Collins, Educational Publishers, Kirkcaldy Road, Bishopbriggs, Glasgow.

## Place, Time and Society 8-13

### Schools Council Project: History, Geography & Social Science 8-13



Now Published Shops	Pupils' Resource Units	November/December	Prices to be announced later.
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		Teaching for Concepts	85p

Inspection copies of items from Pupils' Resource Units are available from: Collins, Educational Publishers, Kirkcaldy Road, Bishopbriggs, Glasgow.

Published by Collins, Educational Publishers, Kirkcaldy Road, Bishopbriggs, Glasgow.



## 34 Resources



## Resources for religious education

A who-does-what list compiled by FRANCES STADLEN

In the past decade religious education has been in a state of change and confusion. This has put you back on the drawing boards.

Some religious education teachers feel that this subject has been discredited by a lack of objectivity on the part of some of their colleagues. Others consider that as a result of the trend towards general, moral education, as opposed to instruction in a particular faith, the subject has, disastrously, been swallowed up by the humanities as part of integrated studies courses. This has confused publishers. Those who are not straightforwardly evangelical in their approach, tend to offer a mixture of "objective" material on the one hand and data for the discussion of "values" on the other.

Resources tend to fall into these broad categories: evangelical; the "objective", sometimes comparative, study of the world's religions and/or ideologies; and moral education (including such themes as personal identity, families, sexuality and social issues, as well as the nature of truth).

Material is produced and distributed by churches, by general commercial companies, by religious concerns and by voluntary agencies. The following are some of the major producers and distributors.

## CHRISTIAN EDUCATION MOVEMENT (CEM)

CEM are "a partnership of state and church, teachers, parents and students".

Records Section, Christian Education Movement, 2 Chester House, Pages Lane, London N10 1PR.

Geoffrey Chapman. Titles are predominantly for the Roman Catholic market but a number of ecumenical and Protestant publications. Several series on Catholic liturgy, worship and prayer. Others for Catholic infant, primary and secondary schools on religious and moral education. *Living and Believing*, for eight to 11-year-olds, gives guidance on projects, background reading and visual aids. A

growing list of titles for religious education courses in Africa. *Geoffrey Chapman*, 35 Red Lion Square, London WC1R 4AG. Another major Catholic publisher is St Paul's Publications, 57 Kensington Church Street, London W8.

Concord Film Council Ltd. Films that "present the facts and leave the audience to draw their own conclusions". Small section on religion, mainly comparative, which can be used in conjunction with the Schools Council Lancaster project led by Nialan Smart.

Many of their films reflect the move towards objectivity or neutrality on the one hand, and, paradoxically, identification and "empathy" on the other. Concord have recently acquired part of the series of films made by LEA ETU called *You in the 70s*, 20-minute plays illustrating contemporary social issues affecting adolescents.

Concord Film Council Ltd, Nacton, Ipswich, Suffolk IP10 0JZ.

Churches Television and Radio Centre (CIVC). Financed by the Lord Ruck Foundation for Christian Communication. No connexion with any one church or broadcasting medium. Aims "to express Christian beliefs through the reality of the present day world". Productions vary from those with an explicit Christian message, to those dealing with social issues. Some take the form of dramas and documentaries. All CIVC films are available for sale or hire, and sound cassettes for sale only.

Churches and Television Radio Centre, Hillside, Merry Hill Road, Bursley, Watford WD2 1DR.

McGraw-Hill Films. Films that cross the borders between religious education, sociology and psychology. *A Position of Faith*, for instance, deals with the debate about whether a young Catholic homosexual should be ordained. *Free To Be... You and Me* could be screened as three mini-films (Friendship and Cooperation, Expectation and Independence) or one 42-minute film.

Other films include *Law: A Spectrum of Order and The Religious Experience*. All productions have objectives, content, preparation and follow-up work. McGraw-Hill Films, Shoppenhamers Road, Maidenhead, Berkshire.

Educational Productions Ltd (E.P.). Moving away from straightforward biblical instruction towards moral education and the study of world

faiths (Hinduism, Islam, Jainism, Sikhism, Buddhism, Zoroastrianism, Christianity in India, the Holy Mass). A wide series is being published in conjunction with the Scripture Union with filmstrips, notes and tape-recorded commentaries forming the basis of the project. The three existing sets are *Communications, Relationships and Living in Society*. The series on Values is being expanded.

Other Producers of slides include Woodhouse Ltd Colour Slides, Holwell Industrial Estate, Wintford. *Bury Peerless*, 22 King's Avenue, Minnis Bay, Bournemouth. *The Slide Centre*, 11 Bellevue Road, London SW17.

Edward Arnold. A large RE list which is non-evangelical but has a Christian focus. Some historical material for middle and secondary schools on the Christian church, the life of Jesus and monasteries. Focus on Christianity is designed to provoke thought and discussion in the fourth and fifth year. It covers the church, social work, individual famous lives, politics and the third world. A series of textbooks and puzzles on the Bible. Some of the items in the general studies catalogue are useful, including *Making Judgements and Decisions*, *The Rich and the Poor Nations and Atoms and Ancestors*. Edward Arnold, 25 Hill Street, London W1X 8LL.

Lutterworth Press. Tries to reflect current educational and theological opinion and in the same time put across the essentials of the Christian faith. "We aim to be neither with-traditional nor exclusive-evangelical". Topic books on neighbourhood, house, the self. Themes for school assembly. Senior and middle school titles on different faiths, ideologies and ethics. One could be screened as three mini-films (Friendship and Cooperation, Expectation and Independence) or one 42-minute film.

Other films include *Law: A Spectrum of Order and The Religious Experience*. All productions have objectives, content, preparation and follow-up work. McGraw-Hill Films, Shoppenhamers Road, Maidenhead, Berkshire.

## An exercise on the brink of theatre

Drama Study Units 16. John Foster. Heinemann Educational Books Ltd, 48 Charles Street, London WC2N 3AF. Reference set: 70p. Individual plays containing 20 copies: £1.25.

It is ironic but comprehensible that English teaching has often found difficulty in bringing "drama" to life. The set play, having been chosen for its moral accuracy, truth to life, characterization and/or relevance, suffers apologetically into text and students are bored by it. The remedy has been to turn it back into drama by reading it, acting it, improvising around it and so on. Occasionally this is so successful as to bring the exercise to the brink of theatre, but the set play has ensured the victory of improvisation, and the formal barriers which separate relevance from reality have survived.

So it is that in the mid-1970s, one has the depressing spectacle of a series of units designed to help children of 13 to 16 make the most of drama. The set is based on six plays "that are often set for study" for this age-group. The plays are, respectively: *An Inspector Calls* (Bridgwater), *Lord of the Flies* (Bridgwater), *The Short and the Tall* (Hall), *Everything Weaker* (Hall), *A Taste of Honey* (Dolaney), and *A Taste of Honey* (Dolaney). Also, for some reason, *The Importance of Being Earnest*.

So far as they go, these units are good. Each four-page unit contains an introduction to the play and its author, discussion questions on each act, suggestions for improvisation and writing, and eight or nine of the questions about the play for discussion or written answers. The questions are sensible and draw out the motives, development and

courses. CUP also have a philosophy, some of which would be in the sixth form. Cambridge University Press, 92, Euston Road, London, NW1.

Teachers' and Resource Centres. Specializing in RE. Barnborough Road, College, Middlesex (DES). Westhill College Religious Education Resources Centre, Alton House, Kingsmead Close, Alton, Hants RG2 6LL (DES).

Metlock College of Education, Leek, Derbyshire. Honiton College, Hills Road, Exeter. St Gabriel's College, Centre, 32 Flodden Road, Exeter, Devon EX2 8JH (Society for Promoting of Farmington Trust (moral education)).

Individual Faiths and Sects. The Christian Education Movement, North End Road, NW11. National Society (C of E) working Religious Education. Great Peter Street, London SE1. The Scripture Union, 5 St. Street, London W1 (wide range of inclusion, and the editor of inclusion, and requesting nominations to be submitted on the basis of a reasonably detailed account of relevant work done. Staff involved professionally in teaching should also be included).

After this, the nominations received and the evidence on which they were based would need to be fairly rigorously sifted by the LEA's inspectors and advisers, preferably in consultation with HMI and perhaps staff from the nearest university's department of education.

The register itself would be a relatively brief document, suitably introduced and broken down into areas of expertise such as techniques of planning, methodology, assessment, with each area further subdivided as necessary. Under each sub-head would then be listed in columns the names of the staff concerned, the subject area and level within which the technique was applied, the name, address and telephone number of their establishment, and the day and time when they could most easily be contacted. Once compiled, a copy of the register should be on display in every staff room for ready reference.

Finally, those in the register should be asked to submit, to their head or principal, brief annual reports to the director's office of any work that has arisen as a direct result of their inclusion in the register, so that some form of feedback meeting of the scheme could take place.

What, then, could be the advantages of such a register? First, it would enable every full-time teacher in the authority to know whom to approach for which kind of help, from specialist education staff to innovative teachers in other establishments. In sharp contrast to the fragmentation of effort and isolation in which so many teachers interested in innovative work operate, hiding too many lights under too many bushels. This information could then facilitate a system of informal consultation by allowing a direct link to be established between a teacher in need and the person possibly able to assist, thus avoiding the "hit or miss" limitation of many official short courses, due to the fact that the course takers often present a varied set of needs, and in any case, are rarely able in brief the course gives beforehand as to what their specific needs are.

Ideas, argument, experiences, research



An idea for a resource bank of teachers' skills

## Another register

P. G. Reti

"Resource utilization" has too often been limited to the context of educational hardware and software located in schools, colleges or teachers' centres. It should include on a register of staff who would be able and willing to contribute proven specialist skills relevant to staff development in the curriculum field. This would enable an area system of informal consultation to be set up that would be relatively inexpensive, could cross the increasingly artificial boundaries between educational sectors, and perform some of the functions that the non-existent professional centres proposed by Janes were intended to carry out.

Second, the range of techniques to be listed in the register would need to be identified. Second, the criteria for inclusion in the register would need to be established—sound evidence of successful development work recently carried out with given groups of pupils or teachers, using given techniques; evidence of personal suitability to act as a consultant; staff from other institutions; and obviously, the agreement of both the staff member nominated and their head or principal to their inclusion.

The next step would involve a letter from the director of education or CEO to each head and principal outlining the purpose and the range of the register, and the criteria of inclusion, and requesting nominations to be submitted on the basis of a reasonably detailed account of relevant work done. Staff involved professionally in teaching should also be included.

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What, then, could be the advantages of such a register? First, it would enable every full-time teacher in the authority to know whom to approach for which kind of help, from specialist education staff to innovative teachers in other establishments. In sharp contrast to the fragmentation of effort and isolation in which so many teachers interested in innovative work operate, hiding too many lights under too many bushels.

This information could then facilitate a system of informal consultation by allowing a direct link to be established between a teacher in need and the person possibly able to assist, thus avoiding the "hit or miss" limitation of many official short courses, due to the fact that the course takers often present a varied set of needs, and in any case, are rarely able in brief the course gives beforehand as to what their specific needs are.

The register itself would be a relatively brief document, suitably introduced and broken down into areas of expertise such as techniques of planning, methodology, assessment, with each area further subdivided as necessary. Under each sub-head would then be listed in columns the names of the staff concerned, the subject area and level within which the technique was applied, the name, address and telephone number of their establishment, and the day and time when they could most easily be contacted. Once compiled, a copy of the register should be on display in every staff room for ready reference.

Finally, those in the register should be asked to submit, to their head or principal, brief annual reports to the director's office of any work that has arisen as a direct result of their inclusion in the register, so that some form of feedback meeting of the scheme could take place.

What, then, could be the advantages of

Mary Poppins goes to Siberia—but only in the form of a play, performed thirty times to full houses of schoolchildren at the Young Spectators' Theatre in Krasnoyarsk, East Siberia.



## COURSES

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School of Education

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## SOCIOLOGY OF EDUCATION:

Offered jointly with the Department of Sociology for those who wish to teach the sociology of education in colleges of education, or sociology in schools and colleges of further education.

## COUNSELLING:

For those who hold or seek appointments in guidance and counselling in schools, further and higher education.

## REMEDIATION AND SPECIAL EDUCATION:

For those who hold or seek teaching and advisory posts in these fields.

## MUSIC IN EDUCATION:

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Full details are available from the University of Exeter School of Education, Sandy Street, Exeter EX4 3LZ.

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Studies of how children of all ages and students actually learn mathematics.

## THE TEACHING OF MODERN LANGUAGES:

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## THE TEACHING OF SCIENCE:

Studies of curriculum development, educational research methods and educational technology in relation to school science, with opportunities to study in areas of Biology, Chemistry or Physics in the appropriate department of the Faculty of Science.

## THE TEACHING OF HISTORY:

Studies of the teaching of the subject in schools and of a particular historical topic.

## LANGUAGE IN EDUCATION:

For teachers of English and others who wish to further their understanding of the relationship between language and learning in pupils of all ages, with a view to specialist appointments in schools, colleges and the advisory service.

The School of Education also offers registration for the degrees by research of Master of Education (one year full-time or two years part-time) for experienced teachers with good Honours degrees or an advanced diploma in Education at a high standard, Master of Arts and Doctor of Philosophy.

Full details are obtainable from: The Academic Registrar and Secretary (Higher Degrees in Education), The University of Exeter, Northcote House, The Queen's Drive, Exeter EX4 4GL.

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Index to Appointments Vacant, Wanted and other classifications

## Appointments vacant

Nursery Education	36
Headships	36
Deputy Headships Senior Masters/Mistresses	36
Other Appointments	36
Primary Education	36
Headships	36
Deputy Headships Senior Masters/Mistresses	36
Heads of Department	36
Scale 2 Posts	36
Remedial Posts	36
Scale 1 Posts	36
Appointments in Scotland	41
Middle School Education	41
Headships	41
Deputy Headships Senior Masters/Mistresses	41
English	41
Mathematics	41
Modern Languages	41
Music	41
Physical Education	42
Science	42
Technical Studies	42
Other than by Subjects	42
Secondary Education	42
Headships	42
Deputy Headships Senior Masters/Mistresses	42
Remedial Posts	42
Art and Design	42
Careers	42
Classics	42
Commercial Subjects	42
Economics	42
English	42
History	42
Humanities	42
Mathematics	42
Modern Languages	42
Music	42
Pastoral	42
Physical Education	42
Religious Education	42
Rural Studies	42
Science	42
Social Studies	42
Speech and Drama	42
Technical Studies	42
Other than by Subjects	42
Appointments in Scotland	41
Middle School Education	41
Headships	41
Deputy Headships Senior Masters/Mistresses	41
English	41
Mathematics	41
Modern Languages	41
Music	41
Physical Education	42

Technical Studies	71
Other than by Subjects	71
Appointments in Scotland	71
Junior Sixth Form Colleges	74
Scale 1 Posts	74
Special Education	74
Headships	74
Deputy Headships Senior Masters/Mistresses	74
Heads of Department	74
Scale 2 Posts	74
Scale 1 Posts	74
Independent Schools	78
Deputy Headships Senior Masters/Mistresses	78
Art and Design	78
Classics	78
Economics	78
English	78
Geography	78
History	78
Mathematics	78
Modern Languages	78
Music	78
Pastoral	78
Physical Education	78
Religious Education	78
Rural Studies	78
Science	78
Social Studies	78
Speech and Drama	78
Technical Studies	78
Other than by Subjects	78
Appointments in Scotland	71
Middle School Education	41
Headships	41
Deputy Headships Senior Masters/Mistresses	41
English	41
Mathematics	41
Modern Languages	41
Music	41
Physical Education	42

Teachers' Centres	85
Adult Education	85
Community Homes and Associated Institutions	86
Assessment Centres	86
Youth and Community Service	86
Overseas Appointments	87
Administration	89
Local Education	89
General	89
Child Care	90
Educational Psychologists	90
Examiners	90
Librarians	90
Ancillary Services	90
Miscellaneous	90
English as a Foreign Language	92

## Appointments wanted

## Other classifications

### Public Notices

### Educational Com

### Awards and Schol

### Personnel

### Announcements

### Exhibitions

### For Sale and W

### and Postal Supp

### Holidays and

### Accommodation

### Properties for S

### and Wanted

## Nursery Education

### Headships

### Hampshire

### Mid-Hants Area

### The Mid-Hants County Council

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## ESSEX COUNTY COUNCIL

### CASTLE POINT and ROCHFORD AREA

The Fitzwilliam Comprehensive School, Hockley Road, Rayleigh Essex. (Roll 1285) Group 11

## Headmaster/Headmistress

of this 8-form only comprehensive school for pupils aged 11-16 years, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

Walsall Metropolitan Borough Education Committee

## Head Teacher

£7,944-£8,568 p.a.

Forest Comprehensive School, Hawbush Road, Leamore, Walsall, WS3 1AG (Group 11)

The post is vacant as from January 1977, though an appointment will be made for a year prior to this, with effect from January 1976.

The school became comprehensive in September 1973, and is situated in the Herdren area of the Borough; all teaching staff receive a social priority allowance.

Application forms and further particulars obtainable from the Director of Education, Education Department, Council Offices, Rookery Lane, Aldridge, Walsall WS8 9PL, to be returned not later than Monday, 20th October, 1975.

## DORSET

### Bournemouth School for Girls

Applications are invited for the

## HEADSHIP

of this GRAMMAR SCHOOL of 800 girls, including 200 in the sixth form. The salary is £7,456-£8,072 (Group 10).

The School is housed in good buildings, opened in 1980, and situated on the outskirts of Bournemouth. The successful candidate will be expected to take up the appointment in September, 1975. Assistance with removal and legal expenses is given.

Application forms and further particulars (a.s.e.) from the Senior Staffing Officer, Eastern Area Education Office, Portman House, Richmond Hill, Bournemouth.

## SURREY COUNTY COUNCIL

FRINGE AREA, LONDON ALLOWANCE £141 p.a. THROUGHOUT THE COUNTY.

Generous relocation expenses in approved cases.

### THAMESMEAD COUNTY SECONDARY SCHOOL

Mengley Lane, Sharnbrook

## Headmaster/Headmistress

The Headship of this mixed Secondary School is vacant from the Summer Term, 1976. As part of a scheme of reorganisation from September, 1975, this is now a Comprehensive School for pupils aged 12 to 19 years, contributing to a Sixth Form College. Salary Group 10. Scale subject to confirmation £2,456 to £8,072 per annum.

Application forms and further details available from the County Education Officer, County Hall, Kingston upon Thames, KT1 2DJ, to be returned not later than 13 October, 1975.

## MIDDLE

### continued

## Physical Education

### Other Posts on Scale 2 and above

## BEDFORDSHIRE

### EDUCATION SERVICE

MARK GORDON SCHOOL, MARK GORDON, Bedfordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Science

### Other Posts on Scale 2 and above

## EALING

### EDUCATION SERVICE

EDUCATION SERVICE, EALING, Middlesex

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Technical Studies

### Other Posts on Scale 2 and above

## BEDFORDSHIRE

### EDUCATION SERVICE

MARK GORDON SCHOOL, MARK GORDON, Bedfordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Scale 1 Posts

## BEDFORDSHIRE

### EDUCATION SERVICE

MARK GORDON SCHOOL, MARK GORDON, Bedfordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## SHEFFIELD

### EDUCATION COMMITTEE

EDUCATION COMMITTEE, SHEFFIELD, Yorkshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Scale 1 Posts

## EALING

### EDUCATION SERVICE

EDUCATION SERVICE, EALING, Middlesex

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## HEREFORD AND WORCESTER

### COUNTY COUNCIL

HEREFORD AND WORCESTER, Herefordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## HEREFORD AND WORCESTER

### COUNTY COUNCIL

HEREFORD AND WORCESTER, Herefordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## SOMERSET

### EDUCATION COMMITTEE

EDUCATION COMMITTEE, SOMERSET, Somerset

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Secondary Education

### Headships

## AVON COUNTY

### EDUCATION COMMITTEE

EDUCATION COMMITTEE, AVON, Gloucestershire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## East Sussex

### RE-ADVERTISEMENT

## BEACON SCHOOL, CROWBOROUGH

Applications are invited for the

## Headship

of this

## Group 12 comprehensive school

with a large sixth form. Post vacant 1.5.76 or 1.9.76. This is a re-advertisement and application will be accepted and need not re-apply.

Further details and application forms obtainable from the Chief Education Officer, P.O. Box 4, County Hall, St. Anne's Crescent, Lewes, to whom completed applications should be returned by 31st October.

## Headmaster/Headmistress

### Ashfield Comprehensive School

Sutton Road, Kirkby in Ashfield, Notts.

Qualified teachers are invited to apply for appointment as Headmaster/Headmistress of the above school.

Number on roll 1,830. Salary: Group 13.

Vacancy to be filled 1st January, 1976, or as soon as possible thereafter.

Application forms and further details available from the County Education Officer, P.O. Box 4, County Hall, West Bridgford, Nottingham, NG2 7QP.

Closing date: 13th October, 1975.

## BARKSHIRE

### EDUCATION COMMITTEE

EDUCATION COMMITTEE, BARKSHIRE, Gloucestershire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## HERTFORDSHIRE

### COUNTY COUNCIL

HERTFORDSHIRE, Hertfordshire

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Nottinghamshire

### County Council

Nottinghamshire, Nottingham

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

## Nottinghamshire

### County Council

Nottinghamshire, Nottingham

Headmaster/Headmistress of this 11-16 year school, with effect from the beginning of the Summer Term, 1976.

Generous scheme of grants for removal, lodging and disturbance expenses.

Closing date: 17th October, 1975.

Application forms and further details may be obtained from the County Education Officer, P.O. Box 47, Thread-needle House, Market Road, Chelmsford.

# EXTRA

## Mathematics

### Cause for concern

Margaret Hayman, vice-president, The Mathematical Association and head of Mathematics, Pitney High School (GPDST), considers the needs of craft apprentices and similar secondary school pupils

It has been found, among other things, that about two thirds of the pupils entering secondary school can perform mathematical operations for which they can imagine concrete apparatus (say adding 3 to 5); one third still need the actual apparatus. It is also believed that only about 10 per cent of the population ever develop the capacity for abstract thought.

Abstraction is variously defined as "acceptance of lack of closure" or "multiple interacting systems" (Collis, 1974, Linn, 1973) or "those operations for which no imaginable concrete model seems available" (Malpas and Brown, 1974). By any definition, this includes almost all the algebra taught in secondary schools. For example, the ratio of the areas of two squares with linear ratio of 3:2, is a concrete problem since you can cut a square into four small squares in the large one. The similar problem with a linear ratio of 3:2, is an abstract problem since you cannot fit two and a quarter small squares into the larger one. Similarly the idea of multiplying negative numbers is entirely abstract and yet it is part of every school mathematics course and is usually taught in the first year.

Even to the narrow ability range of a selective grammar school there are great differences in the power to abstract. By the age of 12, some pupils can follow a long carefully argued piece of algebra or geometry, while others still need what will one cost in order to solve the equation  $2x-5=7$ . No such group is available for the equation  $2x^2-4x+7$ . To solve this the pupils must have moved to a completely abstract way of thinking which, as has been shown, is never attained by the population. No wonder schools are full of rebellious children and despairing teachers when they are constantly faced with this frustrating situation.

In the light of this knowledge what would be a realistic approach to mathematical education? The present O level courses, if taught in homogeneous ability groups by adequate teachers would probably suit the top 10 per cent of the ability range, although Sir Cyril Burt (in *The Gifted Child*) has suggested a suitable course for the least able mathematical group, perhaps the bottom 20 per cent of the range, and will now consider the sort of course suitable for the middle ability range which includes the craft apprentices mentioned earlier.

First, for most children the purely academic excitement of a subject is rarely enough to attract the interest. The relevance of the work to life in school and to later life out of school is more important. So mathematics in school should be linked as much as possible to practical situations. Secondly, to complete one piece of work correctly is a strong motive for tackling the next piece. Therefore the work must be kept within the capabilities of the pupils.

The subjects actually needed in craft courses are mainly arithmetic: handling whole numbers, money, area and volumes, percentages, the idea of accuracy, approximations, using instruments to measure distance and angles, scale drawing, use and interpretation of diagrams and graphs, flow diagrams and the organisation of work, the use of formulae and calculating aids, and the trigonometry



"Even in the narrow ability range of a selective grammar school there are great differences in the power to abstract".

## Introductory Vector Analysis

C. D. COLLINSON

The aim of this book is to present a basic course in vector analysis suitable for applied mathematics, science and engineering students. The interests of the applied mathematician and the scientist lead them to require mathematical techniques before they possess the mathematical maturity to understand the rigorous treatment of these techniques. For this reason it has been necessary to include chapters on the calculus of functions of several variables and on integration theory; topics which many readers will study rigorously later.

Cloth £5.50 net Paper £2.50 net

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## International soundings

Geoffrey Howson, University of Southampton, discusses the recent mathematical seminar at Salzburg

International conferences and seminars on mathematical education have flourished for almost two decades. At the famous meeting at Royaumont in 1959 and the immediate successors, the course of action was clear: to design a syllabus fit for future mathematical heroes.

The international meeting provided a stage upon which members could argue the virtues of the solution offered by their subject or country—sets for six-year-olds, metrics for the million, groups for the general. Only one kind of child seemed then to be considered—the future mathematician who, by an early age, had demonstrated his right to belong to the academic elite.

Nearly 20 years after Royaumont, the emphasis has changed. In many countries the reforms have lost their impetus with the realization that the provision of new materials alone achieves little. Again, educational changes, brought about by social pressures, mean that it is no longer always feasible to isolate children of "academic ability" and to ignore the rest.

It was in this frame of mind that some 20 teachers, inspectors and administrators, representing 10 Western European countries, attended a recent seminar at Salzburg organized by the School Mathematics Project. Two particular themes were studied: mathematics in the comprehensive school and the teacher and change.

The extent to which educational systems have "gone comprehensive" varies considerably, as do the experiences gained. That was to be expected. Nevertheless, it came as a surprise to the writer that only two or three of the countries appeared to take comprehensive education to its logical (or illogical, depending on one's personal preference) conclusion, the mixed ability class.

Although there was general interest shown in individualizing instruction and in promoting group work, I got the impression that most countries of Europe are unlikely to abandon homogeneous grouping in the near future. It was also apparent that such comprehensive education as was offered often came to an

end at about the age of 14. Even if pupils still remained in the same school after that age, differentiation of some kind usually occurred. One was reminded of the official report from one country—now represented at Salzburg—which recommended that all pupils in the age-range 12 to 14 should follow a common course, but that this was not meant to imply that they should work at the same rate, use the same methods, or follow exactly the same syllabus.

It was clear, though, that even if traditional groupings remain, then the introduction of such new approaches in the classroom will involve considerably greater demands on the teacher: changes which will be at least as difficult to implement as those in content. It was in discussing the nature of such demands and how they could be most effectively met that the seminar reached its second theme.

There is no doubt that curriculum developers in the 1960s devoted insufficient attention to the rôle of the teacher in curriculum development. The actual processes of change and the problems of large-scale dissemination were virtually ignored in a frenzy of syllabus construction and material preparation.

We in England involve the teachers in the process of curriculum renewal then do many countries: the Schools Council is teacher-dominated and the SMP itself, along with most other independent projects, is teacher-based. Yet the number of teachers playing an active part in the direction and evolution of the SMP is minuscule compared with the number using its texts.

How is a project or ministry successfully to communicate its aims to a vast number of teachers? How does one best ensure that these aims do not become distorted and garbled in classroom use? How are teachers to be trained so that they can adopt to change? What part should teachers play in the actual construction of curricula?

The answers (if they exist) to these and many similar questions raised at the meeting, ultimately hinge on three considerations: the kind of pre-service training given, the opportunities for in-service education, and the status of the teacher within

society and within the educational power.

All three considerations are factors in the most crucial professional status of teachers: discussions continually expounded on this key point, with the medical and legal professions, even if only in the light of training, in the responsibility of the degree of autonomy.

In the past the teachers received considerably less training than their counterparts in finance available and in demand for teachers, an overall shortage of teachers, and a national system of service education.

Now, however, changing throughout Europe is still a great shortage of trained mathematics teachers in every country, but there is an overall shortage of teachers, and a national system of service education.

Such measures, though, though they may be necessary, are not sufficient. They must be accompanied by a series of other measures, for example, efficient and demanding.

The corresponding England and other countries do not doubt the need for a professional status can only be achieved if teachers themselves determine the nature of their training. Yet, decisions being taken on political rather than educational grounds? The problems are great, but they must be clearly and patiently argued out if in-service training is to be organized so that it leads to

Continued on page 45

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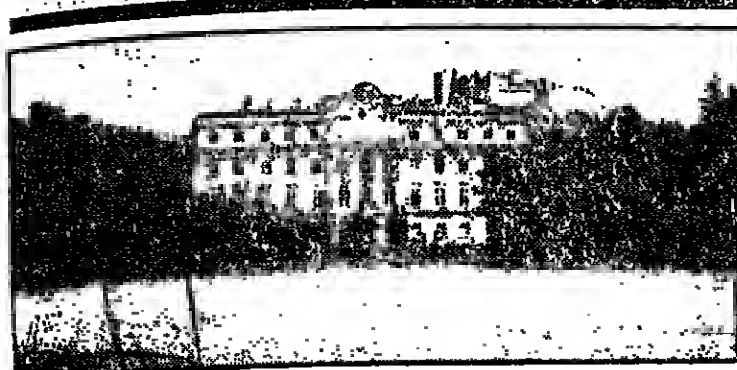
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Setting for the seminar: Schloss Leopoldskron, Salzburg.

Continued from previous page

noted with interest the foundation in Scotland of a Teachers' Council.

Clearly, in many countries the teacher is not yet allowed to make decisions and it was argued that because of a lack of suitable training many are incapable of doing so from a position of knowledge and professional competence.

Yet how does one reach and help such teachers? It was common experience that no more than a third of teachers take advantage of the in-service education at present provided. Should financial inducements be given or should it become a part of a teacher's contract? In England the successful completion of some form of in-service education could be linked with a move from one salary scale to another. Yet this strategy is denied other countries which usually have a single pay scale for teachers and have no needs of demeritism or post with special responsibilities.

Who, however, would be responsible for determining the form of such in-service training? Could it be left to the ministry or to a "paternalistic" university school of education? Clearly, professional status demands that teachers themselves determine the nature of their training.

Yet, decisions being taken on political rather than educational grounds? The problems are great, but they must be clearly and patiently argued out if in-service training is to be organized so that it leads to

greater professionalism rather than less.

These remarks apply to all teachers, not only to those teaching mathematics: the situation is complex and the way ahead far from obvious. Within mathematical education the situation is also complex and the events of the past 20 years have brought us no nearer a consensus of opinion on what our aims should be. Whether or not such a consensus is possible, or even desirable, was a matter for discussion. It was, however, generally accepted that the absence of clearly defined distance to the recruitment of able young teachers, but also a cause of considerable bewilderment to many teachers in post. Moreover, a portion of the mathematics teachers' meetings, and once a year we are still able to spend a few days together at Stoke d'Abernon.

Part of the value has undoubtedly been in the wide range of viewpoints. My own approach is strongly theoretical. At the other end of the spectrum we have primary teachers, who are child-centred and necessarily concerned with the practical affairs of the classroom. In between we have several colleges of education lecturers, whose job it is to relate theory and practice to the needs of teachers. Including heads of mathematics, who tend to be more subject-oriented than the primary teachers; a deputy head teacher; and Laurie Buxton, whose universe of discourse includes all these. The number of 35 and 40, a population changing slowly over the years around a core of long-term "regulars".

It has always been made clear

## Theory and practice meet

—to their mutual benefit. By Professor R. R. Skemp, University of Warwick

For nearly 10 years a small group of us has been meeting about eight times a year to discuss the teaching of mathematics. Thinking about the factors which have kept the group in being has led me to realize that it embodies on a small scale a relation between theorists and practitioners from which something useful can be learnt about mathematics and about this kind of interaction.

How did it start? And what have done and teachers to offer each other which in the present cannot be proved sufficient to keep up meeting regularly over the years?

The beginning was a weekend course on the psychology of learning, held at a beautiful Elizabethan manor at Stoke d'Abernon, owned by the ILCA and used by them as a residential centre for London teachers. The course was organized by Gerald Gray, now retired, and Laurie Buxton, then district inspector for Islington, and now staff inspector (mathematics) for the ILCA, who has convened the group ever since. There were a series of regular meetings, and once a year we are still able to spend a few days together at Stoke d'Abernon.

Part of the value has undoubtedly been in the wide range of viewpoints. My own approach is strongly theoretical. At the other end of the spectrum we have primary teachers, who are child-centred and necessarily concerned with the practical affairs of the classroom. In between we have several colleges of education lecturers, whose job it is to relate theory and practice to the needs of teachers. Including heads of mathematics, who tend to be more subject-oriented than the primary teachers; a deputy head teacher; and Laurie Buxton, whose universe of discourse includes all these. The number of 35 and 40, a population changing slowly over the years around a core of long-term "regulars".

It has always been made clear

that we would be discussing long-term theoretical issues, so that no one would be misled into counting in hopes of new classroom material. But my own conviction is that a good theory is the most practical offering one can make to a teacher. If someone has a concrete or service electrical equipment, what he needs most is that which he is unlikely to discover by himself, namely a knowledge of electrical theory.

He can teach himself to solder, and if necessary, he can buy his own screwdrivers. The man on the job may be good at making his own observations, but only a theory will tell him what is behind the observations. It enables him to understand, predict, and sometimes to control by relating them to a unified body of knowledge.

During the past decade there has been much innovation in both the teaching and the content of mathematics. That which has not been soundly based on appropriate and valid theory has at best been trial and error learning; and at worst, keeping up with current fashion. Children pass through our educational system but once, and we must do better for them than this.

What has been interesting is the degree to which these new ideas, though in a convinced theorist, have found an echoing response in experienced, down-to-earth, practical teachers. Not in so many words: the day has yet to come when I hear a teacher say "What we need is a valid theory". The response is indirect, in the amount we find to say to each other: both about the theoretical ideas themselves, and especially about the ways in which these relate to their own teaching activities and observations.

Among the topics which we have discussed together over the years are the formation of mathematical concepts, schematic learning of mathematics, relational and instrumental understanding, meta-learning relative to mathematics, and the motivation and direction of

mathematical learning in the classroom.

The benefits to my own thinking of working with this group have been great, and such as could not easily have been obtained from talking to my fellow-academics. Much of my new thinking has been crystallized into some kind of expository under the stimulus of a coming meeting of this group; and has been influenced, favourably I believe, by the constant awareness that I was preparing a talk for busy teachers who were giving up a weekend at home in the expectation of hearing and discussing matters of genuine relevance, not much in speculation from an ivory tower.

There are practical reasons why it usually seems to be necessary for theorists and practitioners to be different people. One is simple. It is unwise to change horses in mid-stream, and while fully engaged in teaching it is best to stay with familiar methods in which one has mastery and confidence until one has something better for sure, and well established in one's own mind, to take its place. The state of creative uncertainty about a topic which has to be accepted while waiting for new ideas to take shape is never comfortable for a teacher. Another reason is time. Thinking is slow and hard work. Putting the results on paper, or into the form of a discourse, is time-consuming and laborious. To find this time is not always easy even for teachers in universities. For those in schools, though it is possible and is done, this is usually over a fairly short term, and at personal sacrifice.

So, then, as for practical reasons, theorists and practitioners have to work separately for much of the time, it is all the more important—again, for practical reasons, some of which have been outlined above—that they come together regularly in ways such as have been described.

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Other sections deal with the evaluation of apparatus, the problems of assessment, a discussion of the place in primary work of the technical vocabulary of current mathematics, and a note on the place of mathematics in the integrated day. There are a number of appendices giving supplementary information, and one of these is devoted to the content of professional courses.

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Norman Moore, Headmaster, Vale of Evesham ESN School  
Alec Williams, Tutor for courses in special education, Kingston upon Hull College of Education

This is a course in social mathematics for slow learners between the ages of 10 and 16. It sets out the basic core of mathematics which everyone must know in order to cope with the adult world. This essential mathematics is carefully ordered and structured, and concepts are always presented in a social context with which the adolescent slow learner can readily identify.

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**Continued overleaf**



'TAMS' Tests of attainment in mathematics in schools: a feasibility study, by Ray Sumner and Irene Kyles, NFER

It should be pointed out that N.E.S. has not made a commitment to a national monitoring system. We are aware, too, that in the apparent sophistication of the method and scope of material we would have much to learn in the early stages of such an enterprise.

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In November, 1972, a week's conference on "Mixed Ability Teaching in the First Years of the Secondary School" was held in the Ladbroke Mathematics Centre. Mr. Jim Mayhew, HMI, then an ILE unitis Inspector, directed the course and invited Mr. John Stewart, then head of the mathematics department, Chelsea Secondary School, to talk about the scheme he was using which was a development of the "Bertle" Banks We Kent Maths Project. (See page 51.)



Monthly meetings of the project were held throughout the remainder of the academic year. By 1972/73 and it became obvious that a full-time coordinator was needed as the project expanded. Mr Ron Gordon Goldstein, a teacher in one of the "pilot" schools, was seconded during the September, 1973 as an advisory teacher to coordinate the project.

At the end of the first year (1971-0300 had been duplicated) by the centre and was handed out to many ILEA schools inquiring how they could obtain SMILE materials. With only a part-time secretary the

just begun with their first year. Twenty-one schools outside ILEA have purchased cards and are operating the scheme. Other sets of cards have been sent to teachers' centres and colleges of education as far afield as Denmark and Tasmania.

For the past two years a weekend conference has been held once on each occasion 60 teachers from SMILE schools have attended and added their expertise to the project. Two full-time longer courses have been organized and 10 teachers attended for 30 Mondays

The SMILE project is run for teachers by teachers and committees have been formed to look at the mathematical structure, communication and other aspects of examinations for the project, perhaps in the first instance a Mode III CSE. The great advantage of the project is that it is fluid, it can take in material from other projects and the "DMC" project and "MMC" project can easily be inserted. One "pilot" school is using videotapes where the card asks the child to look at an extract from a mathematician's programme and then answer questions.

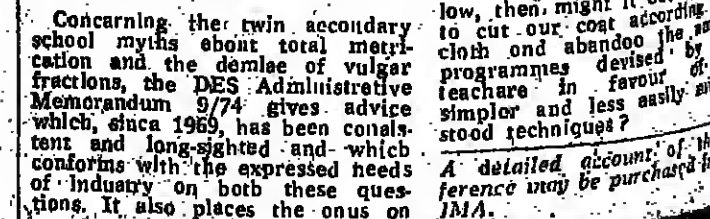
Anyone interested in seeing SMILE school in action or who would like to know more about the project should get in touch with us. We have a dedicated "SMILE teachers' centre and the SMILE project is only part of our work.

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# Statistics and the Continuing Mathematics Project

R. J. Hayler writes about the contribution CET (the Council for Educational Technology) is making to the current needs of schools in a subject of growing importance in the syllabus

Up to 10 years ago many mathematics graduates completed their degrees without having had an opportunity to take a course in statistics. The worthiness of statistics as a topic for study by potential mathematicians was apparently doubted by many academics, and often the subject was available, if at all, only as an optional course.

Nevertheless, in a number of disciplines the use of statistical methods has increased considerably (some might say alarmingly), and it is in the mathematician that users of statistics will turn in the hope of finding help. It can be presumed that many of these users will be disappointed when they find mathematicians unable to help.

However, during the past few years statistics has made considerable inroads into school syllabuses at elementary and advanced level. In this respect, at any rate, mathematicians, scientists and social scientists appear to be in harmony on syllabus content, rather than at odds as they are over other recent trends.

But appearing to agree on general aims is one thing. Establishing a satisfactory and useful course is another. Teachers who have taken a substantial course in mathematical statistics sometimes find difficulty in applying their knowledge to the practical problems which are the concern of the user. Further, it is not always easy to make the transition from studying theoretical statistics as a mature student to communicating as a teacher elementary statistical ideas to younger pupils.

Any tendency to vacillate in the face of these difficulties may be helped by unfamiliar overtures within the staffroom from biologists and geographers facing new syllabuses. Most A-level Geography syllabuses include work on the collection and analysis of statistical data—the Oxford syllabus (as revised several years ago) contains a particularly comprehensive list of statistical techniques with which students are expected to be familiar. In the field of biology the new JMB syllabus (1976 onwards) makes a clear statement of the mathematical and statistical requirements of the biology course.

The pattern of developments arising from such inter-departmental

discussions would be an interesting topic for study, but here it is sufficient to note that apart from personal relations, the availability of time, expertise and suitable texts are all significant factors in providing an appropriate course. The last of these is emphasized by the frequency with which one hears that 'a decent book has yet to be written on the subject'—and this although there is a far wider range of books on statistics than for the more traditional applied mathematics of mechanics.

What statistics, then, do pupils need to know? This is a puzzlingly difficult question to answer when, as now, the statistical requirements of syllabuses vary from board to board, and all appear to grow as syllabuses are revised. As in all states of transition, needs vary widely, and even alarmingly.

On the one hand, recent graduates and experienced teachers of the sciences and social sciences may ask for no more than a simple introduction to histograms and to measures of position and spread. On the other, it is possible to find members of a lower sixth class demanding some understanding of the background to the  $\chi^2$  test, since this test happens for no more than a simple introduction to histograms and to measures of position and spread.

Another dimension of this unevenness of need appears in the technical problems which arise in elementary statistics. The experienced user of statistics is able to keep in perspective the importance of the problems associated with, for example, selecting and naming class intervals, and choosing appropriate diagrams for different types of data.

For the beginner such problems are perplexing and distracting. They must be added to the considerable conceptual difficulties which leave many students with a rather vague notion that statistics consists of number crunching, according to complicated and apparently arbitrary rules.

The Continuing Mathematics Project (CMP) was established to develop independent learning materials for potential users of mathematics who were not specializing in the subject (at A level, for example). Throughout the development work the team has tried to keep a foot on each of two clear—but not parallel—tracks: those of service mathematics and independent learning. The service aspect implies finding out what the customer needs, while the need to teach the student who is working in the main without a teacher implies a variety of approaches and materials.

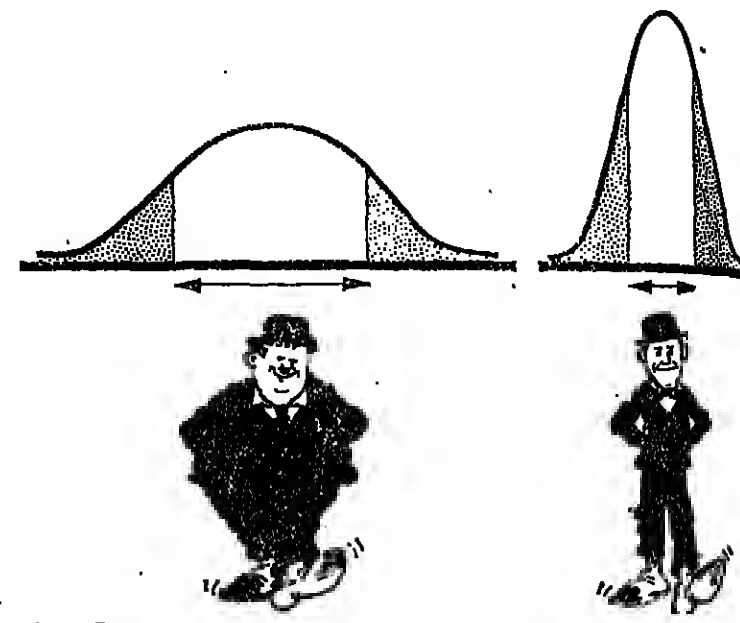


Figure 2

The original study which gave rise to the project ('Continuing Mathematics'—G. Howson and M. Erast—NCET) envisaged that certain mathematical topics, including statistics, would require particular attention from the project team. This prediction has been amply confirmed during the lifetime of the project when units of work on statistics have consistently been those in greatest demand.

To achieve a clear picture of the statistical methods required, approaches have been made to the GCE examination boards, to science departments in colleges and universities, to lecturers and teachers and to various other individuals and institutions. While such an inquiry could not be expected to produce a consensus view, it certainly showed up the needs and interests of particular groups and provided background information on the many and varied conditions in which any statistics material might be used.

It was clear that it would be necessary to provide a variety of techniques for students with varying levels of maturity and commitment to studying the subject, within differing time allocations and in situations where the tutor might or might not be familiar with the content of the material.

In trying to come to terms with this complex brief, the team has prepared some 17 units of work on statistics. A unit is expected to occupy an average student for two to three hours and the relationship between the units developed so far is illustrated in the 'map' (Figure 1).

Topics named in rectangular boxes are the titles of CMP units; those in oval enclosures are assumed to have been provided in earlier courses. The map embodies several underlying principles in the team's thinking. In particular: ● There is a need for an elementary course in descriptive statistics which is appropriate for students starting statistics from scratch; the course should also clearly important ideas for students who are revising these elementary methods. However, as the amount of statistics in pre-sixth-form courses increases, it is expected that students will often be able to bypass this particular course.

● For the mature student requiring a substantial course in the basic distributions of statistical theory (e.g. the Binomial and Normal distributions) a good grounding in elementary probability is essential. For this reason the three unit probability sequence is a pre-requisite for the full six unit sequence to the two distributions previously mentioned.

● For the student with little time and/or little inclination towards mathematics, a less formal approach is desirable, which will give some degree of understanding without encouraging the student to wield statistical tools with inappropriate data to produce misleading results. After considerable thought, inquiry and heart-searching, it was decided to prepare a short course on hypothesis testing, approached via non-

parametric tests. These tests have counterparts in the 'classical' (which depend on the nature of the underlying distribution) but the fewer assumptions are made, the more is the whole less involved in computation. It is thought to be conceptually and mathematically easier to bring up on classical statistical methods, there are signs that non-parametric methods are increasingly being adopted by users. It is hoped that the three unit sequence (Hypothesis Testing I-III) will provide a readable and instructive guide to those wishing to carry out elementary significance testing.

In preparing materials it has always been necessary to compromise between the desirable and the possible. While colour video might have many virtues as a self-learning medium, it is clearly not a viable proposition if the material is to be accessible to schools working on hard pressed capital allowances, however, variety of presentation is judged to be important for motivation and for understanding. Some of the methods used are:

● Programmed texts, particularly useful for cases of reference, by developing an argument and by describing a technique (eg step-by-step approach to drawing up a frequency table).

● Filmstrip and tape, in particular to give a visual impact (eg comparing two areas represented by frequency in a histogram).

● Corroborative, to clarify and emphasize ideas (see Figure 2).

● Audio tape and text, to pace the student and to direct the student's attention to points in the material.

● Games, to emphasize aspects of chance events.

● Experiments, to emphasize the context in which statistical experiments are used.

The development phase of the project continues until next August, during the final year, when the institutions are taking part in the use of CMP materials to their own satisfaction. As an essential part of guidance to potential users, it is hoped to prepare brief notes relating the project's units to existing examination syllabuses.

Further information about the project may be obtained from the Director, Continuing Mathematics Project, Mantall Building, University of Sussex, Falmer, Brighton, Sussex.

John Hayler was the author and initial organizer of the CMP from 1972 to August 1975. He is now a lecturer in education in the University of Bristol.

When the School Mathematics Project was established in 1961 it was a radical innovative project whose main objective was to improve mathematical education by providing more appropriate syllabuses, texts and examinations. Fourteen years later the SMP texts are now used in more than half the schools in England and Wales and the SMP is equated in many people's minds with 'established modern mathematics'.

In some respects this limited conception of the present-day SMP work is misleading, since there has been no diminution in the original innovative spirit nor in the SMP's fundamental aim to improve mathematical education by providing more appropriate syllabuses, texts and examinations. The SMP curriculum development project organized by (and for) practising school teachers, whose main task is the writing and testing of materials for classroom use. The SMP is not an official government or authoritative body—independent in this context meaning its freedom to make decisions and implement them.

Nor is the SMP in any sense a 'commercial' organization; it is established as an educational trust who account a trustees, all intimately concerned with the overall work and finances of the SMP are properly and responsibly handled.

Curriculum development work in mathematics is the continuing raison d'être of the SMP and this is now fulfilled in an increasing number of ways. Ongoing work includes the revision of existing texts and materials, organizing annual in-service courses and numerous talks to help inform teachers, close liaison with the Oxford and Cambridge Examination Board who administer the SMP examinations and Cambridge University Press who publish most (but not all) SMP materials.

The administration involved is dealt with by two full-time staff who account a trustees, all intimately concerned with the overall work and finances of the SMP are properly and responsibly handled.

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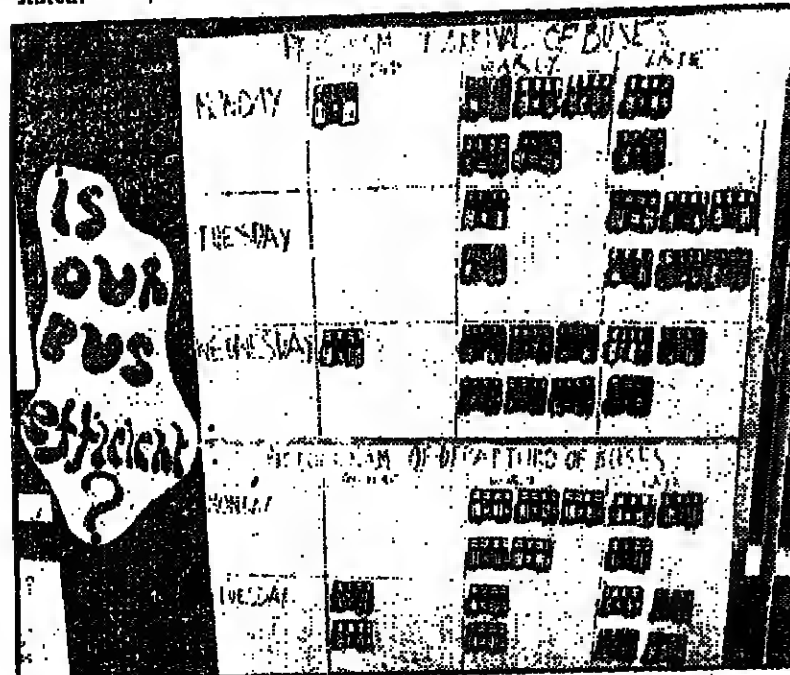
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—or putting the cart before the horse. By Julia Matthews, head of Thorntree (I and N) School, Charlton, London.

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**Using the urban environment.** By Jo Stevens, ILFA district inspector, (mathematics)

Three major ways of using the environment emerged. One is the provision of life-like situations for practising particular mathematical skills or exemplifying mathematical techniques. Infant drawings of flats in Barnsbury gave rise to shape language, to counting and to simple calculations. Juniors in Southwark developed skills of surveying in their local park. Traffic sweeping round a school in the centre of a one-way

Similarly, a school in Southwark and another in Shepherd's Bush based their work on their own new schools under construction. At the bricklaying stage the Southwark children were able to do some work on porosity of different types of brick and on patterns in bricks. The work which was a useful way of using an environmental starting point to develop other ideas back in school.

Regents Park Zoo where the birds are opening a teachers center. The life studies this autumn. An early visit confirms its potential. "It has that network of regular paths that has been used for the roof before," he says. "What can you deduce from a daily record of admission figures for last year?" "What problems arise from feeding the animals and the people?" "Are there flow problems at the Zoo? ... and the children?"

ne tall is an elephant?"



Piaget-type check on a seven-year-old's grasp of spatial order. He copies the teacher's "washing line"; then if successful puts his line in reverse order.

*Form C* provides a permanent record of the child's progress in each area, with particular detail on mathematics. *Form I* records what coverage of concepts a particular centre of interest, project or activity offers. Thus by cross-checking from this form to the child's *Form*

\* *Progress records for children.* By Julia Mayhew. Published Chambers/Murray. Forum I.

**Maths without tears from BBC School Television. By David Rosecare, producer**

**Quinn**

numbers

It's this video-cassette recorder



Frankenstein prepares his creation with the help of Igor. A scene from "Positively Not", one of the Mathshow programmes.

Seriously, the mathematical topics are:



Alive and doing well, writes John Dichmont, Nottingham University

she has not yet sorted out how  
notation works. She draws an

machines, and writing down the results. A mother was walking past with her three-year-old daughter. They came and watched us for

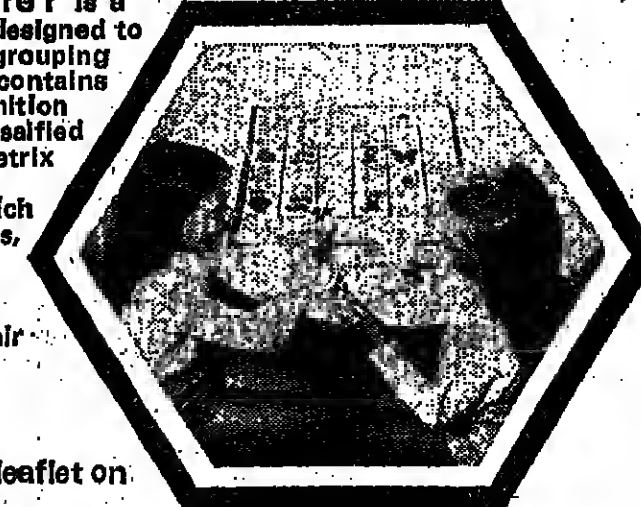
## What?

"That's how old I am". Helen and Suffron getting down to it

\_\_\_\_\_

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teach the logic skills of grouping and classifying. The set contains brightly coloured recognition cards that have to be classified and grouped, a P.V.C. matrix board and excellent Teacher's handbook which explains in full the games, the vocabulary and concepts that each is intended to develop and the reasoning behind their sequencing.



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## Reaching the reluctant teacher

Taking in-service training to the schools. By Hugh Neill, University of Durham Institute of Education

For those whose interest and desire is to see good mathematics taught in the classroom, these are difficult times. For those whose particular interest is in in-service work the outlook is made bleaker by the shortage of money. Local authorities are seeking to ensure that their money is spent in the most efficient way and it is quite right that mathematics should come under scrutiny along with other subjects. But when we see that mathematics is a subject where there is a staff shortage anyway, that some teachers are reluctant to grant a release for in-service work, that the situation can only be made worse by the increasing difficulties of recruitment and that local authorities are not able to increase their in-service budget, it is clear that we must rethink the strategy of in-service work in mathematics.

At the moment various bodies, such as I.C.E.S., colleges of education, universities and the polytechnics, and anyone else who has an interest, can propose and mount short, medium or long courses. Provided they get enough support to make the courses economic to run, they go ahead. Those who plan these courses, particularly the resident ones which are probably the most useful but certainly the most expensive, will find it increasingly hard to get support for their courses.

Although these courses are extremely worthwhile for the individual, it is usually possible for a school to release only one teacher to attend them. It is not fair to ask how much the school benefits from the attendance of that teacher on the course. In an ideal world, such a teacher would be expected to disseminate information and ideas among his colleagues, providing an opportunity for the mathematics in the school as a whole to benefit from the course. In practice, however, this does not happen very much.

It is also arguable that most of those who attend courses are those who least require them. If teachers have sufficient interest in mathematics to go on a course, they are already likely to be giving constructive thought to their teaching in the classroom. The real difficulty is to reach those who need the help, but are reluctant to attend courses, either because their main teaching energies are directed towards other subjects or because they are heavily committed in other school activities, or for any other reason.

In order to be effective, in-service work in mathematics has to reach all those who teach mathematics in schools. I believe that the only effective way that this can be done is in the schools themselves organized by the head of department. Of course, time needs to be found for this. In some schools where work of this type goes on, meetings are held during lunch time once every fortnight. In others a school period is allocated when all who teach mathematics are free to attend a meeting or teachers meet after school.

However, except when meetings are in school time, there is little except moral pressure exerted upon teachers to attend while there is much more pressure to attend meetings about matters not so directly concerned with what takes place in the classroom. But moral pressure is not enough. The head needs to accept responsibility for giving priority to this work and to help the head of mathematics department to arrange and hold these meetings.

And what should take place in these meetings? I believe that we need to promote serious thought and discussion in every school about the mathematical issues and to apply the results in the classroom.

There is not really enough space here to go into detail about this

issue. The paper by Dr T. J. Fletcher, IMA, staff inspector for mathematics, entitled *Secondary Mathematics Today (Trends in Education No. 35, October 1978)* discusses mathematical issues which have arisen over the past 15 years in a very helpful way. This paper would make an admirable starting point. My belief is that every teacher whose main subject in the curriculum is mathematics has a professional responsibility to keep up to date with his knowledge of the changes in classroom organization and teaching methods which are being advocated. Decisions about syllabuses and methods of working will need to be made, especially in the few years ahead when the examination system is being reconstructed and schools are being reorganized; wise decisions can only be arrived at by whole staff involvement.

We return to the part played by the providers of in-service training. I would like to see the providers getting into schools and making themselves available for school-based discussion of the type I have suggested. They should act as a sounding board for the ideas of department heads, questioning and challenging assumptions which have been taken as axiomatic for too long. And I hope that if discussion of the issues by all the mathematics staff takes place, then the ideas brought forward would be translated into changes in the classroom, and that these results would in their turn be critically examined. In this way the teaching of mathematics would enter a period where instead of being static it became dynamic, with continuous responsible development taking place.

## Changes in Scandinavia

Nordic problems parallel ours. By A. C. Vaigo

When in the 1960s detailed recommendations for the modernization of mathematics teaching were put forward in Scandinavia by two inter-Nordic groups of experts, the Nordic Commission for Mathematics Modernization (NKM) and the Nordic Commission for Mathematics Teaching (NMT), the prevailing idea was to give pupils some insight into mathematical concepts and widen their understanding of principles involved. But in the more recent past a gradual change of emphasis has become evident. It has been pointed out from several quarters that schools should concentrate more on teaching sound mathematical skills, vital for every occupation and career.

Employers and higher education leaders were the chief grumblers. Stockholm University eventually found the situation so serious that in order to bring the mathematics curriculum nearer to the required standards before embarking on their degree studies, students had to undergo a week-long crash course for the subject.

Naturally, all this was kept in mind by a further team of experts, representing Denmark, Finland, Norway and Sweden, whose job was to draw up a common syllabus for teaching up to data, mathematics in the nine-year compulsory school. The team's main aim was to consolidate the modernization of mathematics already in full swing and at the same time make the teaching of this important subject more uniform or harmonized over the entire region.

The proposed syllabus also outlines a comprehensive working programme for the infants (grades 1 to 3), juniors (grades 4 to 6) and seniors (grades 7 to 9), and adds a large number of examples and interpretations. There is a good measure of sound general advice to teachers.

"It is of utmost importance," the experts declare, "that pupils apply their mathematical knowledge and skills to problems taken from daily life or constructed from information given by public authorities, mass-media, trade and industry or obtained from other school subjects, especially from physics and social sciences." This is valid, in particular, in the case of boys and girls whose intellectual capacity is below average, they say.

Meanwhile, Sweden and Finland have revised their mathematics teaching on the lines suggested by such an extent that no essential differences exist in its aims, contents and methods. In Denmark a modernized syllabus was published a few months ago, whereas Norway is at the moment paving the way for her "new" grammar-school mathematics.

As regards the desired level of mathematical proficiency, the Scandinavian experts say it will be much easier to achieve if children learn arithmetical skills as early as possible and from grade 7 (age-group 14) onwards use a slide rule. Even the weakest brethren might benefit from many gadgets, provided they had adequate training. Mental arithmetic should receive ample attention and both the group work and independent study ought to be greatly encouraged.

Swedish National Board of Education (SÖ) has even issued a special handbook on the basic requirements that the less bright pupils should reach by the end of the third, sixth and ninth school years. These guidelines (*Basföretag i matematik*) which reduce the size of the theoretical section and increase the use of practical material, have been well received by rank and file, and as a spokesman of the SÖ affirmed, "many of the arithmetical skills have already taken a turn for the better."

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for this Group 11, 8 F.E. Comprehensive School. Built in 1952 on one site, the school has every facility including 15 acres of playing fields. Within easy reach of London. Well established courses to C.S.E. and G.C.E. "O" and "A" level in most subjects. S.P.A. allowance plus London Weighing £267 per annum.

There is a scheme for removal expenses.



Application forms and further particulars available from D. H. Wilcockson, Director of Educational Services, London Borough of Havering, Education Department, Mercury House, Ramford Road, Romford RM1 3DR to be returned by 10th October, 1978.

## Oxfordshire County Council

Segsbury Comprehensive School  
Roll 610  
Challow Road, Wantage, OX12 8DP

## DEPUTY HEAD (GROUP 9)

Required for January, 1978, due to the promotion of the present holder to Headship. The school is comprehensive in the first and second years. Applications are invited from suitably qualified and experienced teachers able to contribute significantly to the development of a growing school.

Apply to the Headmaster. Stamped addressed envelope please.

## Leicestershire

THE BOSWORTH COLLEGE, DESFORD

(A Leicestershire Plan 14-18 Upper School with Community College)  
Principal: Timothy Rogers, M.A.

## GROUP 14 VICE-PRINCIPAL

Required for January a sympathetic practical idealist to take full share as one of three vice-principals in the policy making and management of this Group 14 College. Should have concern both for the espousal and problems of young people and for the College's relationship with the wider community.

Details from the Principal, to whom applications (no forms) and names and addresses of two referees should be sent by 10th October.

## Leicestershire

HIND LEYS COLLEGE, SHEPHERD

(A Leicestershire Plan 14-18 Upper School with Community College)  
Opening August 1978

Principal Designate: T. Hughie Jones, M.A., B.D., A.M.B.M.

## GROUP 11 VICE-PRINCIPALS

VICE-PRINCIPALS (two posts) required for this new Community College, opening August 1978. The posts, for January or April, are open to men and women. Candidates are advised to send for further particulars. Apply (no forms) giving full particulars, and the names and addresses of two referees to the Principal Designate, c/o Director of Education, County Hall, Glenfield, Leicestershire LE3 8RF not later than 10th October.

SECONDARY Headships continued from page 42

**MERTFORDSHIRE**  
THE EDUCATION DEPARTMENT  
Leighton Way, Hatfield  
Herts. AL10 1AA  
On 10th October 1978, to 10th November 1978, to 10th December 1978, to 10th January 1979, to 10th February 1979, to 10th March 1979, to 10th April 1979, to 10th May 1979, to 10th June 1979, to 10th July 1979, to 10th August 1979, to 10th September 1979, to 10th October 1979, to 10th November 1979, to 10th December 1979, to 10th January 1980, to 10th February 1980, to 10th March 1980, to 10th April 1980, to 10th May 1980, to 10th June 1980, to 10th July 1980, to 10th August 1980, to 10th September 1980, to 10th October 1980, to 10th November 1980, to 10th December 1980, to 10th January 1981, to 10th February 1981, to 10th March 1981, to 10th April 1981, to 10th May 1981, to 10th June 1981, to 10th July 1981, to 10th August 1981, to 10th September 1981, to 10th October 1981, to 10th November 1981, to 10th December 1981, to 10th January 1982, to 10th February 1982, to 10th March 1982, to 10th April 1982, to 10th May 1982, to 10th June 1982, to 10th July 1982, to 10th August 1982, to 10th 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Ampleforth (this form)  
Hemel Hempstead, as soon as possible

[illegible]

**LONDON, S.E.5**  
**MARY DATHILOR GIRLS' SCHOOL**  
Canterbury Cross  
1 Victoria Road, Croydon  
(School) 548

Wanted in January two girls  
8PFF 11,1257 to teach two times  
throughout the school to A.G.  
wanted for 1957-58. The girls  
to call with (1) personal and  
copies of two references should  
be sent to her as Miss E. P.  
the headmistress, Miss S. P.  
Bodwin.

**HARDENHUSEN SCROOL**  
Chapman  
Enrolled 12 to 18 comprehensive,  
number on roll 1,413, sixth letter  
78  
Registered for 1st January 1978  
temporary work qualified MASTER  
in BUSINESS for ONGLISH  
Drama  
The English Department functions  
as part of the Rec. & Menialities  
and established a maximum  
curriculum, artist, leading to A  
large, first, second and C.B.S.  
The publication of the examina-  
tions from the Headmaster, Harden-  
huse School, Hardenhuse Lane,  
Hardenhuse, which is a  
stamped, notated envelope. Close  
date 16th October, 1975

**Other Posts on  
Scale 2 and above**

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**BEDFORDSHIRE  
EDUCATION SERVICE  
NORTHERN AREA  
PILOTH SCHOOL  
Brickhill Drive, Bedford**

**HADSFORD (City of)**  
**METROPOLITAN COUNCIL**  
**O. WOOD GRAMMAR SCHOOL**  
 Comprehensive  
 required for January  
 if available,  
 transfer of  
 to June 1960

## The Time Supplement

## Education

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 STATE HIGH SCHOOL  
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 Dr. Paul  
 TEACHER is re-  
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 to teach across the age  
 y range.  
 in former chairman from  
 Education Officer, Lon-  
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 Office, 100, Road, Ley-  
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Palmer Brighton  
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October, 1978.  
Jones, Arco Educational  
New York Buildings, Old  
and RNT INT.

ROD. Shoofield, 813 ARE  
January, 1976, a TEA-  
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and to A. C. F.,  
C.S.F. Scio 3 for a  
satisfied person but con-  
would be given to appli-  
or first opportunity  
(NY).

on forms are obtainable  
teacher at the school  
be returned to him as  
possible.



**The most effective way of reaching secondary school teachers is through The Times Educational Supplement.**

**Research shows that 70% of all state secondary school teachers with buying and/or recommending responsibility for school equipment read the TES.**

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**Phone Dennis Styles in  
London on 01-837 1234  
or Advertisement Manager in  
Scotland on 031-225 6875 and  
get all the facts and figures.**

**The Times Educational  
Supplement.**

Source: Primary and Secondary Education Readership Survey.  
L. Harris, 1972

Students desiring to take the **ECONOMIC GRADUATE DIPLOMA** in the **DEPARTMENT OF MINISTRY, Economics and British Government** are asked to **7 C.B. Advanced level**, and the **promotion** courses for the **Advanced level** are provided in current affairs, economics, statistics, and minor subjects. Ability to teach minor subjects **Advanced level** essential. Willingness to help with other courses **advantage**.

Apply directly to Headmaster, **High School of Economics and Statistics**, **Portsmouth and names of two referees**. All applications will be from

Richmond Road, Shonfield, S13 8  
Required for January, 1976, a T.S.  
Client of HISTORY up to a T.S.  
to G. I. Lovel and to A. I. for  
with Clive to C.S.E. Scale 3  
reliably qualified person but a  
satisfaction would be given to ap  
cations for a first opening  
(Scale 1 only).

Application forms are obtain  
from the Headteacher at the sch  
and should be returned to him  
soon as possible.





















SECONDARY  
continued

**ROTHESHAM**  
Metropolitan Borough of  
EDUCATION COMMITTEE  
11-16 Mixed, Ayrton, 420 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

**SUFFOLK**  
COUNTY COUNCIL  
NORTHAMPTON GRAMMAR SCHOOL  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## WALTHAM FOREST

London Borough of  
EDUCATION COMMITTEE  
The Borough is within easy access  
of Central London and is located  
in the Waltham Forest area.  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## WARWICKSHIRE

EDUCATION DEPARTMENT  
KINGSLEY HIGH SCHOOL  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## Scale 1 Posts

**AVON COUNTY**  
EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## AVON COUNTY

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## AVON COUNTY

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## REDFORDSHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## CAMBRIDGESHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

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EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
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1000 on Roll  
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Required for January 1976, or  
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with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## CAMBRIDGESHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

SECONDARY  
continued

**DEVON**  
COUNTY COUNCIL  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## DEVON

COUNCIL  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## HERTFORDSHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

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EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
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education. Applications should be  
sent to the Headmaster at the  
school.

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EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## HERTFORDSHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## NORTHAMPTONSHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## NORTHAMPTONSHIRE

EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
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education. Applications should be  
sent to the Headmaster at the  
school.

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EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
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later, a fully qualified teacher  
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education. Applications should be  
sent to the Headmaster at the  
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1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
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1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
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1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

LEEDS CITY COUNCIL  
DEPARTMENT OF EDUCATION

Unless otherwise stated:

- Closing date is ten days after the appearance of the advertisement.
- In respect of Headships and Deputy Headships in all schools, and other posts in primary, middle and special schools, forms are available from, and returnable to, the Director of Education, Department of Education, Great George Street, Leeds, LS1 3AE.
- For other posts in secondary and high schools, application, by letter, should be made to the headteacher of the school concerned, giving full details and the names of two referees.
- The post reference number should be quoted on all correspondence.
- Requests for forms and details should enclose a stamped addressed envelope.

## SPECIAL SCHOOLS

## SCALE 1 POSTS

**S. 989** **REWOOD CROFT DAY SPECIAL SCHOOL**  
(No. on roll 100) 11-16 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

**S. 990** **REWOOD CROFT DAY SPECIAL SCHOOL**  
(No. on roll 100) 11-16 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## PRIMARY SCHOOLS

## SCALE 3 POST

**E. 1002** **KIPPAX NORTH JUNIOR AND INFANT SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 2 POST

**N.E. 1003** **WIGTON MOOR INFANTS' SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 1 POSTS

**S. 991** **MORLEY BLACKBURN JUNIOR SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## S. 992

**ROTHWELL ROBIN HOOD JUNIOR MIXED AND INFANT SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 1 POST

**E. 1003** **OSMONOTHORPE PRIMARY SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## MIDDLE SCHOOLS

## HEADSHIP

**N.E. 1006** **ARCHBISHOP CRANMER CHURCH OF ENGLAND INFANT SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 2 POST

**N.W. 996** **NOLT PARK MOORE SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 1 OR 2 POST

**N.W. 997** **KIRKSTALL MOORE SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 2/1 POST

**N.W. 1007** **GREENHILL MIDDLE SCHOOL**  
(No. on roll 145) 4-11 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in primary  
education. Applications should be  
sent to the Headmaster at the  
school.

## HIGH/SECONDARY SCHOOLS

## SCALE 4 POSTS

**S. 993** **WINTON CLIVE HIGH SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

**S. 994** **MORLEY HIGH SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

**W. 1008** **PRIESTHORPE SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 2/1 POSTS

**E. 1004** **CROSS GREEN SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

**N.W. 998** **RAWDON BENTON PARK GRAMMAR SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 1 POSTS

**N.W. 999** **RAWDON BENTON PARK GRAMMAR SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## SCALE 2/1 POST

**N.W. 1001** **GUILDFORD SCHOOL**  
(No. on roll 145) 11-18 years  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

Cyngor Sir  
DYFED EDUCATION  
County Council COMMITTEE

Required for January 1976.  
**TASKER'S SCHOOL FOR GIRLS, HAVERFORDWEST**  
A well qualified and experienced honours graduate as Head of Geography Department.  
Scale 3. To teach the subject throughout the school, including 'O', 'A', and 'S' level work.  
The school is due to be reorganised in 1978 as part of the secondary reorganisation proposals approved by the Dyfed Education Committee for the Haverfordwest area. The Authority will therefore be looking for a person who will be able to contribute in a responsible manner to the curriculum at one or other of the two comprehensive schools after reorganisation has taken place.  
Applications (by letter), giving full details of qualifications and experience, the names of two referees, and including two recent testimonials, should be sent to the Headmistress at the school, as soon as possible.  
**PERIPATETIC STRING TEACHER**  
Applications are invited from suitably qualified persons for the post of Violin/Viola Teacher based at Fishguard.  
The person appointed will be a member of a team of teachers implementing the Authority's scheme for instrumental instruction under the supervision of the music adviser. Salary will be in accordance with the Burnham Scale for Assistant Teachers together with the equivalent of a Scale 2 allowance.  
Application forms and further particulars obtainable from the Area Education Officer, G.P.O. Box 18, Education Department, St. Thomas' Green, Haverfordwest. Closing date for applications will be 17th October, 1975.  
**ST. MARY'S R.C. PRIMARY SCHOOL, CARMARTHEN**  
Applications are invited from suitably qualified Catholic teachers for the post of Nursery Teacher at the above-named school.  
Application forms for this post must be obtained from the undersigned but, on completion, should be returned to Rev. Father Oliver, Correspondent to the Managers, St. Mary's, Union Street, Carmarthen, by the 20th October, 1975.  
HENRY D. THOMAS  
Director of Education

## Speech and Drama

## Heads of Department

**WAKEFIELD CITY OF EDUCATION**  
EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## Technical Studies

## Heads of Department

**HAMPSHIRE**  
EDUCATION COMMITTEE  
1000 on Roll  
Headteacher: Mr. J. H. Smith  
Required for January 1976, or  
later, a fully qualified teacher  
with experience in secondary  
education. Applications should be  
sent to the Headmaster at the  
school.

## Educational Appointments

Posts are for January 1976. Unless otherwise stated, application forms are obtainable from and returnable to the Education Officer, 50, Huddersfield Road, Barnsley, by the dates indicated (s.a.s. please).

**ROYSTON COMPREHENSIVE SCHOOL**  
MILANO ROAD, ROYSTON, BARNSELY  
Headteacher: C. Wilson, L.C.P.  
Group 10  
This mixed comprehensive school for pupils aged 11-16 years accepted the full complement of places for September 1975. At present there are 810 pupils on roll and the number will rise to approximately 850 by 1980.  
To accommodate the additional numbers major extensions costing about £250,000 have been planned and building should commence early next year.  
Applications from suitably qualified and experienced teachers are invited for the following senior posts:

## Deputy Headmistress

This is predominantly, but not exclusively, a pastoral post. In addition to being responsible for the welfare of all pupils throughout the school, the holder will be concerned with the provision of educational facilities and student teachers on practice.

## Deputy Head (Director of Studies)

The holder at this key post will be concerned with curriculum development in all its aspects. It is hoped to appoint an energetic teacher with the vision and energy to further educational growth within the school at this exciting time in its development.

## Closing date October 17.

## OAKS SCHOOL

**CYPRESS ROAD, KENORAY, BARNSELY**  
Headteacher: F. Parkin  
The school, a Group 1 five-form entry 11-16 co-educational comprehensive (number on roll 680), is designed to be a model school in the provision of educational facilities with particular interest in Chemistry (scale 3).  
Apply by letter to the Headmaster giving full curriculum vitae and two referees as soon as possible.

## Second Master

The successful candidate, who should be a well qualified and experienced teacher, will take a full share in the management of the school and should have proven qualities of leadership, initiative and ability in the management of the school. There will be a teaching commitment and applicants should indicate the main subjects offered.

## Closing date October 13.

## For application forms please see heading over the top of this advertisement.

## HONEYWELL SCHOOL

**HONEYWELL LANE, BARNSELY**  
Head: T. E. Jones, B.A.

## Head of English (Scale 3)

An experienced and suitably qualified teacher is required to organize and develop the department in the 11-16 years comprehensive school. The school has outstanding facilities for the study of English and the school library's function is expanding.

## Application forms are obtainable from and returnable to the Head at the school (s.a.s. please).

## ST. HELENS SCHOOL

**CARLTON ROAD, BARNSELY**  
Headteacher: O. C. Sete

## Head of Physical Education and Recreational Activities

Required in this developing comprehensive school for 11-16 year old pupils is a teacher to be responsible for a large and thriving department. The successful applicant will head a team of specialist teachers in all aspects of physical education and will co-ordinate all extra-curricular activities within the school. The school has extensive playing fields and a heated indoor swimming pool to be situated within the school grounds.

## Apply by letter to the head giving full curriculum vitae and two referees by October 10, 1975.

**BARNSELY**  
Metropolitan Borough























## UNIVERSITY OF EXETER

## Chair of French

Applications are invited for a Chair of French, tenable from 1 October, 1976. Salary will be on the egraded professorial range; for October, 1975, minimum £7,501, average £8,884 p.a. (cost-of-living adjustment at present under negotiation).

Further particulars may be obtained from the Vice-Chancellor, University of Exeter, Northcote House, The Queen's Drive, Exeter EX4 4JQ, to whom applications (13 copies, overseas candidates 1 copy) should be forwarded so as to reach him not later than 20 November, 1975. Please quote ref 1/10/3111.

**ROBERT GORDON'S  
INSTITUTE OF TECHNOLOGY**  
SCHOOL OF HOTEL AND  
INSTITUTIONAL ADMINISTRATION
Lecturer in  
Food Production

For Professional Cookery and related theory in Higher National Diploma in Institutional Management and in Catering end, Hotelkeeping. Appropriate experience and qualifications essential.

Lecturer in  
Accommodation Services

for Higher National Diploma in Institutional Management and the Higher National Diploma in Catering and Hotelkeeping. At least three years' accommodation administration experience and corporate membership of the HCIMA by examination or degree in Hotel and Catering Management required. Removal of experience assistance.

Salary Scale: £3,216-£6,495

Details from Director,  
Robert Gordon's Institute of Technology,  
Schoolhill, Aberdeen AB9 1FR.

BOROUGH OF SUNDERLAND  
EDUCATION AUTHORITYWEARSLIDE COLLEGE OF  
FURTHER EDUCATION

Applications are invited from suitably qualified persons for appointment to the following full-time posts to commence duties as soon as possible:

## Department of Building

## Lecturer I (Two posts)—Brickwork

The person appointed will be required to teach on craft courses.

Department of Electrical, Mathematics and  
MiningLecturer I for Electrical Craft  
Courses

## Department of Mechanical Engineering

## Lecturer I (Two posts)—Welding

The person appointed will be required to teach Welding Engineering, to craft studies and Shipbuilding Courses.

Department of Naval Architecture and  
Shipbuilding

## Lecturer I in Thick Plate Fabrication

Salaries will be in accordance with Biphem Technical Scale.

Lecturer I £2,469-£4,377

Starting point dependent upon experience and qualifications.

Further particulars and application forms for the above posts may be obtained from the Principal, Wearside College of Further Education, Sea View Road West, Sunderland SR4 5LN. Completed application forms should be forwarded to the Principal before the closing date of 10th October, 1975.

COLLEGES OF  
FURTHER EDUCATION  
continued

## CITY OF MANCHESTER

## EDUCATION COMMITTEE

ST JOHN'S COLLEGE OF  
FURTHER EDUCATION

LECTURER I IN MATHEMATICS: To teach Mathematics at Level 1 and 2. The successful candidate will be required to take up duties in January, 1976.

Forms of application and further details are available from the Principal, St John's College of Further Education, 100, Market Street, Manchester M2 1PL. Applications should be forwarded to the Principal by 10th October, 1975.

Salary scale: £3,279 to £5,405.

## MIDDLESEX

HARROW COLLEGE OF FURTHER  
EDUCATION

Overseas Road, Harrow, Middlesex HA1 2EA.

Telephone: 01-281 8121

For General Commercial Subjects.

LECTURER I IN ENGLISH LANGUAGE AND LITERATURE: To teach English Language and Literature at Level 1 and 2. The successful candidate will be required to take up duties in January, 1976.

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## NORFOLK

## COUNTY COUNCIL

## NORWICH CITY COLLEGE

Applications are invited from suitably qualified persons for appointment to the following full-time posts to commence duties as soon as possible:

BAU L1-11 IN LAW

To teach General Principles of Law and Commercial Law to full-time and part-time students on professional and business courses to advanced level through other qualifications.

Application forms and further details are available from the Principal, Norwich City College, Norwich NR2 2LJ.

Salary scale: £3,279 to £5,405.

## NORTH YORKSHIRE

## COUNTY COUNCIL

SHEFFIELD COLLEGE OF FURTHER  
EDUCATION

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COLLEGES OF  
FURTHER EDUCATION  
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COLLEGES OF  
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Salary scale: £3,279 to £5,405.

## NORTH YORKSHIRE



# CRAIGIE COLLEGE OF EDUCATION AYR

## VICE-PRINCIPAL

Applications are invited from appropriately qualified and experienced graduates for the post of Vice-Principal which will become vacant on 31 December, 1975, as a result of the promotion of the present holder.

Applicants must have a varied experience in education; in particular, experience in a university, college of education, or at a responsible level in school or educational administration is desirable.

The salary for the post is at present £8,352, but after review is expected to be in the region of £10,000.

Additional information, conditions of service and application forms may be obtained from the Secretary, Craigie College of Education, Ayr KA8 0SR, to whom completed application forms should be returned by MONDAY, 20 OCTOBER, 1975.

### ATHROFA GOGLEDD-Dd CYMRU addysg uwch

## North E Wales Institute for higher education

### Clwyd

Applications are invited for the following important appointments in this new Institute incorporating Aston College, Caeleff College and Kelsterton College:

### Head of the school of Social Science (Grade V)

### Principal Lecturer in Music

### Principal Lecturer in Social Work

Salaries in accordance with Burnham Regulations. Application forms and further details from: Dean of Administration, North E Wales Institute, Kelsterton College, Connah's Quay, Clwyd.

## Northumberland COLLEGE OF EDUCATION

## Appointment of PRINCIPAL

Applications are invited from persons with suitable qualifications and experience for the post of PRINCIPAL which will become vacant on 31st August, 1976, on the retirement of the present Principal, Miss Eileen M. Churchill, M.A.

The College will continue to be maintained by the Northumberland County Council as a major institution for the education and training of teachers. It is expected that diversified courses will also be provided from September, 1978.

The salary will be fixed at the appropriate point in Group 6 of the Pelham range of salaries for Principals. The appointment will date from 1st September, 1976.

Further particulars and application forms may be obtained from The Clerk to the Governors, Northumberland College of Education, Ponteland, Newcastle upon Tyne, NE20 0AB, to whom completed forms should be returned by 27th October, 1975.

### UNIVERSITIES Appointments continued

#### SIERRA LEONE THE UNIVERSITY

Applications are invited for the post of Lecturer in Education. The University is a small institution with a staff of 15 and a student body of 100. It is located in Freetown and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, University of Sierra Leone, Freetown, by 15th October 1975.

#### UNIVERSITY OF THE WEST INDIES

Applications are invited for the post of Lecturer in Education. The University is a large institution with a staff of 100 and a student body of 10,000. It is located in Kingston, Jamaica, and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is \$15,000 per annum. Applications should be sent to the Registrar, University of the West Indies, Kingston, by 15th October 1975.

### Fellowships Studentships and Research Awards

#### BIRMINGHAM THE UNIVERSITY

Applications are invited for the post of Lecturer in Education. The University is a large institution with a staff of 100 and a student body of 10,000. It is located in Birmingham and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, University of Birmingham, Birmingham, by 15th October 1975.

#### LINCOLN PRINTMAKING FELLOWSHIP

Applications are invited for the post of Lecturer in Education. The University is a large institution with a staff of 100 and a student body of 10,000. It is located in Lincoln and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, University of Lincoln, Lincoln, by 15th October 1975.

#### YORKSHIRE COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in York and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Yorkshire College of Education, York, by 15th October 1975.

#### YORKSHIRE COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in York and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Yorkshire College of Education, York, by 15th October 1975.

#### YORKSHIRE COLLEGE OF EDUCATION

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### ST. MARY'S COLLEGE, STRAWBERRY HILL, TWICKENHAM TW1 4BX

Principal: The Very Reverend T. P. Cashin, C.M., S.A.

Applications are invited for the following posts:

### Lecturer in Sociology

Required for 1st January, 1976. Courses are offered in this Main Subject department to Certificate, B.Sc. and B.Ed. students, and candidates should be able to contribute substantially to these. Experience of Social Science teaching in schools would be an advantage.

### Lecturer in Psychology

Must be highly qualified, to join team teaching Psychology on 4 courses—Teacher's Certificate, B.Ed. (Ordinary and Honours), B.Sc. (London External) and New Unit Basic. This is NOT a Specialist Psychology appointment; it is a generalist one in the field of psychology in schools, but please state other fields of interest.

The salary for each of these posts will be in accordance with the Pelham Scales plus London Weighting allowance. Applications should be sent to the Principal, by the 15th October 1975, and should include the names of two referees. (There is no special application form).

### Colleges of Education

#### BERKSHIRE COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Reading and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Berkshire College of Education, Reading, by 15th October 1975.

#### BIRMINGHAM COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Birmingham and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Birmingham College of Education, Birmingham, by 15th October 1975.

#### BRISTOL COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Bristol and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Bristol College of Education, Bristol, by 15th October 1975.

#### CLYDE COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Glasgow and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Clyde College of Education, Glasgow, by 15th October 1975.

#### DARLINGTON COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Darlington and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Darlington College of Education, Darlington, by 15th October 1975.

#### DEPTFORD COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in London and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Deptford College of Education, London, by 15th October 1975.

#### GLoucester COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Gloucester and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Gloucester College of Education, Gloucester, by 15th October 1975.

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## Bedfordshire ADULT EDUCATION

### ELSTOW CRAFT CENTRE

### LECTURER-IN-CHARGE

Salary: Further Education Lecturer Grade II, £3,278-25.483

The holder of the post will work in close cooperation with the County General Adviser (Home Economics). The Centre provides day-time and evening classes in a number of subjects as well as counselling and advice for the various women's organizations in the county. The person appointed would be expected to join a team of 14 to contribute towards the development of Adult Education within the County area as a whole.

Further details and an application form may be obtained from: C. P. J. Gwynne, M.A., Chief Education Officer, County Hall, Bedford (Tel. 54811). Closing date for the receipt of applications 17th October, 1975.

### HERTFORDSHIRE COUNTY COUNCIL SOCIAL SERVICES

### DEPUTY PRINCIPAL

SALARY £4,755-£5,818 p.a.

Plethbury School, Sawbridgeworth

Plethbury is a community home with education in the premises accommodating up to 70 boys aged 11-18 years. Applicants are invited from qualified social workers or teachers who have had substantial experience at a senior level.

Further details and an application form may be obtained from: The Director of Social Services, County Hall, Hertford (Tel. 54811). Closing date for the receipt of applications 17th October, 1975.

### DOMESTIC BURSAR

NJC Grade 4 Scale £2,807-£3,088 plus £120 p.a.

In the allowance of non-resident

Crouchfield Community School

Chapman End, near Ware, Herts.

Crouchfield is a community home with education in the premises accommodating up to 70 boys aged 11-18 years. Boys come from a variety of backgrounds, are in the care of the Local Authority and present a range of interesting challenges to those responsible for their care.

Further details and an application form may be obtained from: The Director of Social Services, County Hall, Hertford (Tel. 54811). Closing date for the receipt of applications 17th October, 1975.

### Work with older Adolescents

### COMMUNITY SCHOOL

An Art and Craft Teacher is required at St. John's School, Apethorpe, a Community School for 70 boys aged 15-18 yrs. As an approved school, it accommodates a high proportion of delinquent and disturbed children and art therapy is considered by the school to make an important contribution to the treatment of the boys.

In addition to specializing in Art, Craft and Pottery, with boys of school age and beyond, he or she will be expected to teach general subjects and assist with outward bound activities.

The School itself is set in 52 acres of beautiful countryside and has its own gymnasium, sports hall and swimming pool.

Mr. Lampard, the Headmaster, would be pleased to hear from those wishing to make an informal visit to the School (Tel. Kings Cliffe 283).

SALARY: BURNHAM BASIC GRADE PLUS EXTRANEQUITY DUTY ALLOWANCE £16 hours weekly £879 p.a.

APPROVED SCHOOL ALLOWANCE

HOLIDAY: 5 weeks annually

Application forms from the Personnel Officer, County Secretary's Dept., County Hall, George Row, Northampton.

### Salop County Council

### Northamptonshire Social Services

### COLLEGES OF EDUCATION continued

#### ESSEX HENRIWOOD COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in Henriwood and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Henriwood College of Education, Henriwood, by 15th October 1975.

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### LEEDS CITY COUNCIL DEPARTMENT OF SOCIAL SERVICES THORPARCH GRANGE SCHOOL Boston Spa, Wetherby, Yorkshire

### 2 TEACHERS Rat. TES/C07

Burnham Scale 1, plus £84 p.a. Community Home School allowance, plus £879 p.a. extranequity allowance. Two teachers required for the above address. The Community Home School for 18 boys aged 10 to 14. The teachers will be involved in the total care and education of boys who are backward academically and come from damaging environments. Most of the teaching is individual and incidental with the boys in small groups; we require teachers for basic subjects and with specialist in Woodwork in one of the posts.

The successful candidates will be required to participate in various duties amounting to an average of 15 hours per week. During these duties teachers join the industrial care staff with house groups assisting with the boys' personal development and recreational activities.

Single accommodation is available within the school and a house will be available for one applicant at low rental, or a married couple may make their own arrangements locally. Further details and application forms from Mr. R. W. Underwood, Headmaster, of the above address, to whom they should be sent as soon as possible. Successful applicants are welcome to visit the school—Wetherby Boston Spa Rd. LE19 5BQ. Closing date: 10 days after appearance of this advert.

### Teachers' Centres

#### CROYDON EDUCATION COMMITTEE

Applications are invited for the post of Lecturer in Education. The Committee is a large institution with a staff of 100 and a student body of 10,000. It is located in Croydon and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Croydon Education Committee, Croydon, by 15th October 1975.

#### DEPTFORD COLLEGE OF EDUCATION

Applications are invited for the post of Lecturer in Education. The College is a large institution with a staff of 100 and a student body of 10,000. It is located in London and offers a wide range of courses in education, social sciences, and humanities. The post is for a full-time position and the salary is £10,000 per annum. Applications should be sent to the Registrar, Deptford College of Education, London, by 15th October 1975.

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**MINISTRY OF DEFENCE  
SERVICE CHILDREN'S  
EDUCATION AUTHORITY  
AREA EDUCATIONAL PSYCHOLOGIST  
(MEDITERRANEAN GARRISONS)**

Applications are invited from fully qualified Educational Psychologists with some local authority experience to be based at the Headquarters British Forces Cyprus in Episkopi.

**SALARY** is in accordance with Salary Scales and Service Conditions of Inspectors, Organisers and Advisory Officers of Local Education Authorities, i.e. £3,225-£5,670 p.a. In addition of a London Allowance of £354 p.a. is paid. A tax free Foreign Service Allowance is also payable.

The appointment is supernumerary under the Teachers' Superannuation Act. Official accommodation is provided rent free. The initial engagement is for 3 years.

Application forms and further information are obtainable on request to Ministry of Defence, CM(S)(L), Room 342 Lucan House, Theobalds Road, London, WC1X 8BT and completed applications should be returned to this address not later than 10 days from the date of this publication quoting reference AW/1374.

## AUSTRALIA

**New South Wales  
Department of  
Technical and Further Education  
Teachers of Mining**

Applications are invited for the above positions.

**SALARY** £10,563 per annum range \$A13,111 per annum. Commencing salaries are determined in accordance with qualifications and experience and may be up to the maximum of the range.

**Qualifications:**  
(a) Degree or Diploma in Mining or equivalent sufficient to satisfy the requirements of the Council of Engineering Institutions for registration as a Chartered Engineer (CEng) and membership of the Institution of Mining Engineers.

(b) A Colliery Manager's Certificate together with sound industrial experience, preferably in mechanised mines.

(c) Ability to teach Mine Surveying to the standard of the Mine Surveyor's Certificate of the New South Wales Department of Mines would be an advantage and applicants offering qualifications in Mine Surveying sufficient to meet these needs may be considered.

**Experience:**  
As the student body in the Division of Mining largely comprises Coal Mining Certificate (Undermanagers) and Mine Deputy students, it is desirable, but not essential, that applicants should have some teaching experience in these fields.

**Location:**  
Initial appointments will be to Belmont and Wollongong Technical Colleges.

**Conditions:**  
(a) Career salary scale and promotion opportunities.  
(b) Security of employment.  
(c) Excellent superannuation, subject to certain conditions.  
(d) Eleven (11) weeks annual leave.  
(e) Liberal sick and long service leave benefits.

Interviews will be held in London by an officer familiar with the requirements of the position, local industrial and domestic conditions.

Subject to certain conditions the successful applicant will be eligible for:

\* Payment of fares to Sydney.  
\* Financial assistance towards cost of removal expenses.

\* Financial assistance towards initial accommodation expenses.

For further information and application form telephone or write to the Recruitment Section, New South Wales Government Offices, 88 Strand, London WC2N 8LZ (Tel: 01-539 6051), where applications close on FRIDAY 7th NOVEMBER 1975. When telephoning or writing please quote reference 44/606 (TES).

## AUSTRALIA Education Department of Victoria

The Education Department of Victoria seeks a small number of teachers for service in Primary and Secondary schools to take up employment in mid-April, 1976.

Free air travel to Melbourne, Victoria, for the teacher (and dependants, if necessary) will be provided in return for the teacher's agreement to contract to teach until December, 1977.

Permanent appointment to the Education Department of Victoria can be arranged if the teacher decides to settle in Victoria.

Salaries offered are in the range of \$7,525 Australian to \$11,400 Australian according to qualifications and experience.

Qualifications—teachers for service in Primary schools will be expected to have completed a full three years of approved tertiary teacher training.

Teachers for service in Secondary schools will require a Degree, together with a Post-Graduate Certificate in Teacher Education or its equivalent. Only Secondary teachers offering English, Mathematics, Physical Sciences, Physical Education or Music will be selected on this occasion.

Interested teachers should write in the first instance to the Official Secretary, Agent-General for Victoria, Victoria House, Melbourne Place, Strand, London WC2B 4LG, giving brief details of their qualifications and experience. Inquiries should be received before Friday, October 17, 1975.

## Technical Education Indonesia

### TECHNICAL EXPERTS Mechanical-Electrical

At a Technical Training Centre to assist with the operation of workshops and laboratories; to ensure that staff are conversant with commissioning, operation and maintenance of equipment; to establish student training programmes; supervision of equipment maintenance; observation of safety rules, visits to Secondary Schools; liaison with local industry. Applicants, aged over 30, should have HNC and CGLI full technological certificate in a relevant subject; and a Teacher Training Certificate. An apprenticeship training desirable, followed by 5 years' trade experience and at least 3 years' teaching experience which has included operation and organisation of a workshop in a technical institution. Appointment for 12 months.

Salary will be in excess of current UK earnings plus a tax-free overseas allowance. Superannuation rights may be preserved. Other benefits include free family passage, paid leave, children's education allowance, and free accommodation and medical attention. Applicants should be citizens of the United Kingdom.

For full details and an application form please apply giving details of age, qualifications and experience to:

Appointments Officer,  
Ministry of Overseas  
Development  
Room 317/RDC, Eland House,  
Stag Place, London SW1E 6DH



## Education Overseas

### Botswana

A country about the size of France, in Southern Africa, with a generally sub-tropical climate.

### TEACHERS

**Woodwork and technical drawing  
Mathematics English  
Development studies  
Science (Physics, Chemistry or Biology)**

To teach their respective subjects up to 'O' level. Applicants, aged 25-45, must be qualified teachers, preferably graduates, but college-trained teachers with at least three years secondary teaching experience should apply. Salaries in range £1,714-£2,250 p.a. which includes an allowance, normally tax free, in range £192-£1,880 p.a. Terminal gratuity 25% of basic salary. Applicants for 2-3 years.

### EDUCATION OFFICERS (Administrative) (a) Agricultural Studies

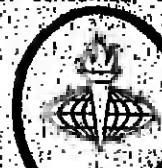
(b) Social Studies  
Within the Ministry of Education, in their respective subjects, to carry out inspections; review and regrade syllabi; advise on textbooks; produce supportive material; guide and assist teachers; organise and conduct in-service courses; assist with selection of candidates; carry out policies of the Ministry. Applicants, aged 25-50, must have a minimum of 5 years teaching experience in an appropriate subject; experience as an inspector an advantage. For the Social Studies post applicants must have a degree in History and Geography, majoring in either subject, preferably with a senior degree.

Salary in range £2,800-£3,340 p.a. which includes an allowance, normally tax free, in range £408-£1,600 p.a. Terminal gratuity 25% of basic salary. Applicants for 2-3 years.

Other benefits (all posts) include free family passages, paid leave, children's education allowances and subsidised accommodation. An appointment grant of up to £300 and an interest-free purchase loan of £300 may be payable in certain circumstances. Applicants should be citizens of the United Kingdom.

For full details and an application form please apply giving details of age, qualifications and experience, and including post concerned to:

Appointments Officer,  
Ministry of Overseas  
Development  
Room 301, Eland House,  
Stag Place,  
London SW1E 6DH



## TEACHING IN ZAMBIA

... in this year-round sunshine offers attractive career employment prospects, good salaries, tax-free 25% gratuity, lower income tax, free passages and baggage allowance, guaranteed accommodation - and an opportunity to use your qualifications and experience in developing work in our new developing nation.

### TEACHERS for 'O' level classes

**Subjects:-**  
Industrial Arts (Woodwork, Technical Drawing, Metal Work), Homecraft, Art (English and History), Physical Education, Science (Mathematics, Physics, Chemistry, Biology and Agriculture), Geography, Commerce (Shorthand and Typing).

**Qualifications:-**  
Applicants should possess either a Degree and a full Graduate Certificate or Diploma, or teaching experience, or a recognised Teacher's Certificate. Teachers may be asked to serve anywhere in Zambia, in a large established school in an urban or rural area or in a completely new school in a remote rural area. Many secondary schools are for boarders and all teachers are expected to make an energetic contribution to the life of the school community, outside the classroom and to be able to adapt their teaching to a practical way to the improvement of the pupils, especially in the rural areas.

**Salaries:-**  
Starting salaries are related to qualifications and experience. In addition there is a 25% TAX FREE gratuity. Salaries for trained teachers with experience are up to £5,388 (c £3,600). Salaries for graduates are up to £3,320 (Married) or £1,120 (Single), up to £2,160 (Married) or £1,120 (Single), up to £2,160 (Married) or £1,120 (Single). Supplement up to £1,160 (married) or £1,160 (single).

**Tax Free Supplements**  
These are paid by the British Government to designated British nationals. The amount payable, which is under review, is related to salary. Designated officers also receive an appointment grant, education allowance, loan, medical aid and assistance and free holiday for children educated in Britain.

Please send full personal and professional details (without obligation), and including full details will be sent to you.  
Recruiting Officer,  
Zambia High Commission,  
7-11 Cavendish Place, London W1V



## JAMAICA

Applications for 1st October, 1976, for the following subjects:  
(1) AGRICULTURAL SCIENCE  
(2) BIOLOGY  
(3) CHEMISTRY  
(4) PHYSICS

Applicants should be graduates of a recognised university, holding a B.Sc. degree in one of the above subjects, and should have at least 3 years' teaching experience in a secondary school.

Applicants should be citizens of the United Kingdom, and should be able to teach in the English language.

For full details and an application form please apply to the Ministry of Education, Jamaica, P.O. Box 10, Kingston, Jamaica.

Appointments Officer,  
Ministry of Overseas  
Development  
Room 317/RDC, Eland House,  
Stag Place, London SW1E 6DH

For further information and application form telephone or write to the Recruitment Section, New South Wales Government Offices, 88 Strand, London WC2N 8LZ (Tel: 01-539 6051), where applications close on FRIDAY 7th NOVEMBER 1975. When telephoning or writing please quote reference 44/606 (TES).

For further information and application form telephone or write to the Recruitment Section, New South Wales Government Offices, 88 Strand, London WC2N 8LZ (Tel: 01-539 6051), where applications close on FRIDAY 7th NOVEMBER 1975. When telephoning or writing please quote reference 44/606 (TES).

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## MINISTRY OF DEFENCE SERVICE CHILDREN'S EDUCATION AUTHORITY BRITISH FAMILIES EDUCATION SERVICE (NORTH WEST EUROPE)

Applications are invited from suitably qualified unmarried teachers to teach in the following schools:

**ADVISER for Early Childhood Education**  
to be based in the following schools:

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## Bedfordshire

### Chief Adviser

Salary Range PO2 (cl £6,729-£7,407)  
Applications are invited for this senior post with extensive experience in the field of education. The person appointed will be required to give energetic leadership to an experienced team of 22 advisers and other professional staff. The Chief Adviser is a member of the Education Management Team and has the opportunity of making a distinctive personal contribution to the development of the Education Service in Bedfordshire.  
The post calls for an individual with a combination of administrative and educational experience. The person appointed will be required to have extensive experience in the field of education, particularly in the area of management and administration. The person appointed will be required to have extensive experience in the field of education, particularly in the area of management and administration. The person appointed will be required to have extensive experience in the field of education, particularly in the area of management and administration.  
Further particulars and application forms may be obtained from D. P. Browning, M.A., Chief Education Officer, County Hall, Bedford, (0234) 83222, Ext. 240.  
Closing date for applications: 17th October, 1975.

## PROFESSIONAL ASSISTANT FURTHER EDUCATION

£4,680-£4,992 per annum

Applications are invited from graduates with teaching experience for the post of Professional Assistant (Further Education).  
The person appointed will have particular responsibilities in the field of adult education.

The post offers a useful introduction to educational administration and may be of special interest to teachers wishing to enter the organising or advisory service in the field of non-vocational further education.

Fringe benefits will include in appropriate circumstances, 100% removal expenses; contribution towards legal or similar fees of up to £300; £120 settling-in allowance end, where applicable, a lodging allowance of £10 per week with second class rail fare home every three weeks—both for a period not exceeding four months.  
Further details and application forms (returnable as soon as possible) from the County Education Officer, County Hall, Ipswich IP4 2JS. (Tel.: Ipswich 55801, ext. 345).

## Suffolk County Council

## KENT COUNTY COUNCIL

### General Inspector

To take special responsibility for the development of careers work in schools; salary £5,850 by £190 (4) to £8,570 within the Soubury Scale (under review nationally).  
This new post indicates the importance attached by the Authority to careers education in schools. The new Education Committee has given impetus to the development of the Careers Advisory Service in the County and the establishment of this post indicates their wish that the work of the schools should develop alongside the work of the Careers Officers.  
The General Inspector will, in addition, carry the usual responsibility for the general work of the schools in an area of the County and will have the opportunity to exercise any other particular experience which he or she possesses. A geographer would be particularly welcome.

### Assistant Inspectors for Physical Education

(1 man and 1 woman)  
Salary £4,685 by £159 (4) to £5,331 within the Soubury Scale. The main post is based in Derby and the work is mainly in the North West of the County (the London Inner Fringe) allowance of £180 per annum applies. The woman's post will be based in Maidstone or West Malling and will work mainly in the South of the County. Interest in a wide range of physical activities is called for and the work will be with the whole age range of children in school. Full details of particular strengths and interests should be stated in the letter of application.  
Assistance with removal expenses, etc., is given in approved cases.  
Further particulars and application forms from W. H. Petty, County Education Officer (reference G), Bedford, Maidstone, ME14 2JA. Closing date: 24 October.

## ADMINISTRATION General continued

### THE OPEN UNIVERSITY ADMINISTRATIVE ASSISTANT NATIONAL TITULAR SERVICES

Applications are invited for the post of Administrative Assistant in the National Titular Services. The person appointed will be required to have extensive experience in the field of administration and management. The person appointed will be required to have extensive experience in the field of administration and management. The person appointed will be required to have extensive experience in the field of administration and management.  
Further particulars and application forms may be obtained from D. P. Browning, M.A., Chief Education Officer, County Hall, Bedford, (0234) 83222, Ext. 240.  
Closing date for applications: 17th October, 1975.

### WEST YORKSHIRE

Applications are invited for the post of Educational Psychologist. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology.  
Further particulars and application forms may be obtained from D. P. Browning, M.A., Chief Education Officer, County Hall, Bedford, (0234) 83222, Ext. 240.  
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### YORKSHIRE REGIONAL EXAMINATIONS BOARD

Applications are invited for the post of Educational Psychologist. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology.  
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### Child Care

Applications are invited for the post of Educational Psychologist. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology.  
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## Educational Psychologists

### ESSEX

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### LEEDS

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### STAFFORDSHIRE

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Closing date for applications: 17th October, 1975.

## Librarians

### BUCKINGHAMSHIRE

Applications are invited for the post of Librarian. The person appointed will be required to have extensive experience in the field of library work. The person appointed will be required to have extensive experience in the field of library work. The person appointed will be required to have extensive experience in the field of library work.  
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## Ancillary Services

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## NATIONAL HEALTH SERVICE

### PRINCIPAL

NHS Training and Studies Centres (Salary £8115-£9990)  
This is a new post which offers a challenging opportunity for a person with practical experience and the ability to relate well to senior NHS managers to make a leading contribution at national level to training and development for a wide range of senior staff aimed at developing operational effectiveness in the NHS. The Principal will be based at Harrogate where a new well-equipped residential Centre is to be opened early in 1976. He will be assisted by a Director of Studies and a number of other training staff.  
Further details, application forms and a job description are obtainable from the Regional Personnel Officer, Yorkshire Regional Health Authority, Park Parade, Harrogate, Yorks HG1 3JL, who are acting as the Department's agents.  
Completed forms should be returned not later than 21 October 1975.

### Doncaster

Applications are invited for the post of Principal. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology. The person appointed will be required to have extensive experience in the field of education and psychology.  
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## HAVERHILL SPORTS CENTRE

### ASSISTANT DIRECTOR

£3,366-£4,095 per annum  
Sufficiently qualified or experienced persons in Physical Education are invited to apply for this post. The Centre provides facilities for a wide variety of sports and is used jointly by the Public and the L.E.A. Facilities include a 25 metre and deeper swimming pools with additional dry facilities under construction.  
The person appointed will undertake certain administrative duties including: the organisation of sports courses at the Centre, the administration of certain sporting aspects (duty rota etc.); liaison with and advising local sports clubs and societies and the organisation of catering facilities.  
The post, which is vacant from 1st January, 1976, offers an ideal opportunity for a suitable person, preferably female, to enter the field of recreation management or to gain experience that will later be useful in seeking an advisory post with a L.E.A.  
Commencing salary according to qualifications and experience. Generous fringe benefits include the possibility of ranked housing accommodation.  
Further details and application forms (returnable by 21st October) from The County Education Officer, County Hall, Ipswich IP4 2JS (Telephone Ipswich 55801 Ext. 420).

## Suffolk County Council

### South Eastern Education and Library Board

### Chief Officer

Applications are invited from suitably qualified persons for the above post which will become vacant on 1st May, 1976, on the retirement of the present Chief Officer, Mr. F. H. Ebbitt.  
The successful candidate, who will also be the Chief Education Officer and who will act as Secretary to the Board, will be responsible for directing the Board's activities in relation to the provision, maintenance and development of the education and library service in the area of the Board.  
The Board, which is a corporate body, is the education and library authority for a semi-rural area of the province comprising the District Councils of Ards, Castlereagh, Down, Lisburn and North Down. The area is one of growth with an increasing population which at present numbers 298,400.  
The salary scale for the post is £10,481 x £258 (3) to £11,285. Further particulars and application forms which should be returned by 24th October, 1975, are obtainable from the Personnel Officer, South Eastern Education and Library Board, 18 Windsor Avenue, Belfast BT9 9EF (Telephone No. 981180).

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## HOMERTON COLLEGE

### CAMBRIDGE

### SENIOR ADMINISTRATIVE OFFICER AND CLERK TO THE TRUSTEES

Applications are invited for the post of Senior Administrative Officer and Clerk to the Trustees at this voluntary, independent college of education (730 students). The post is vacant from January, 1976, on the retirement of the present holder.  
Applicants should have appropriate qualifications and responsible experience in college finances and administration: experience in a college of education a great advantage.  
Non-resident post: salary on scale SO 1/2, with prospect of scale PO 1. Optional contributory superannuation.  
Full details and application forms may be obtained from the Clerk to the Trustees, to whom completed applications should be returned by 23rd October.

### HOMERTON COLLEGE

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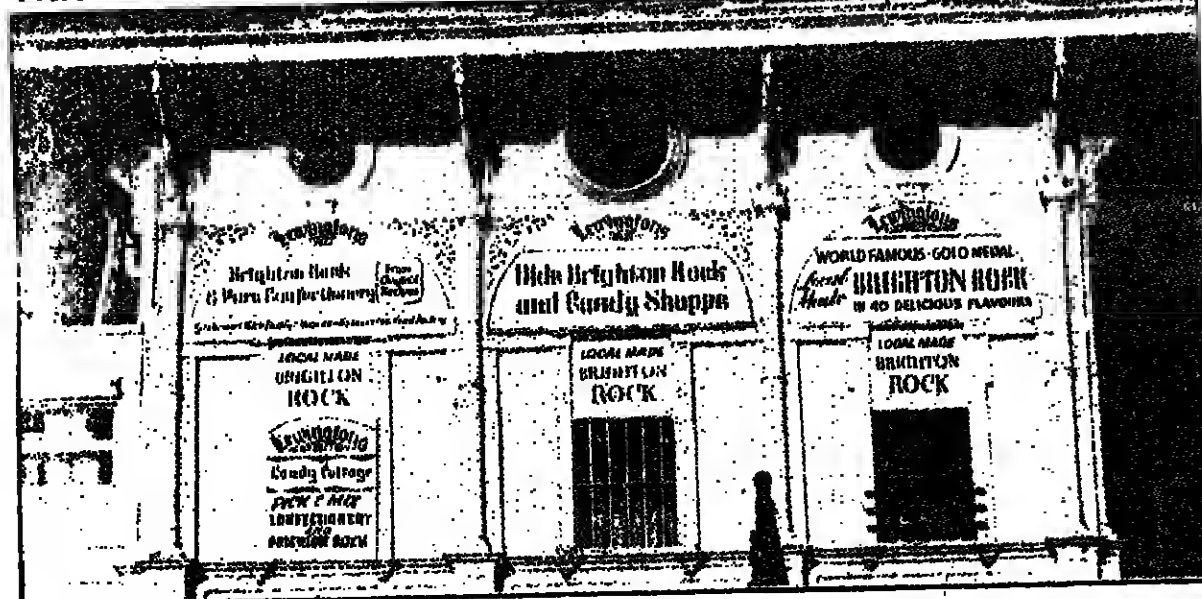






# EXHIBITION BRIGHTON'S TOWNSCAPE

## Victoria Radin



### *The West Pier, Brighton*

Nineteen seventy-five has been European Architectural Heritage Year, in case you have not noticed. You may not have noticed because the economic climate in Britain at least (there are 24 participating countries) has not been the kind which is evoking the kind of the human heritage in their common heritage "is likely to capture the imagination. Nor, indeed, has the year been the sort in which funds for such luxuries as restoration and redevelopment have been readily available.

Nevertheless, a quiet way, 1,400 projects, ostensibly fostered by EAHY, ranging from restoring a parish pump to a £2m redevelopment plan in Norwich are underway. And on the educational side, most major British cities held some kind of exhibition on local architecture. Now at Brighton, with "Brighton 1975" (at the Brighton Museum and Art Gallery and at the Polytechnic) adds itself to the list.

It is an interesting exhibition, though the theme may not find favour with Brighton Corporation, who closed down a similarly controver-

siel one or the museum last year. The exhibition is outspokenly against many of the projects for changing the townscape in which the corporation, directly or indirectly, would involve issues such as the extension of the M23, the future of the West Pier and the restoration of the Jukilee site are tackled.

A section of the show gives instructions to citizens on forming and running amenity societies to fight local planning blights.

Other examples of tasteless redevelopment are spotted (in photographs by Guy Rycart, lecturer in photography at the Polytechnic) and criticized. The modernization of one tarred-out town is labelled 'grossly inhumane'. The metropolis is said to have been 'stuck in without regard to overall effect, and the plastic corrugated porch adds the final touch to the discordant appearance.' Betts Shellfish Shop, on the other hand, is praised for 'conveying its original harmonious design'.

A section on unrenlized architectural projects—among them a neo-classical 'royal marine palace'—

gives a tacit warning against the dangers of wanton anarchy. The other photographs show what happened to the sites of buildings demolished by firms with such ominous names as Reeson and Tickle. Ecology is considered in a set of instructions for tackling Dutch Elm Disease, which afflicts Britain's main import of trees, while a somewhat topographical sketch of a couple of two men who lived in the Carlton Hill area, a poor, class-knit community now demolished and dispersed, gives a sociological warning.

Duncan Simpson, exhibitions officer at the museum, says he put on the exhibition because the town is being "hacked to bits" at the moment. Long ago, Sir Osbert Sitwell complained that Brighton had become a victim of "Victorian Elephantiasis". What is worth preserving is a moot point. The exhibition gives only a cursory look at the town, none at all to Sir Basil Spence's 1960s university campus. But the show will certainly be a talking point in Brighton for some time, and is the kind of campaigning exhibition which most urban areas in Britain could use.

## LANDSCAPE: MAN'S EFFECT ON NATURE

## Cynthia Wickham

**The Nature of Landscape Design.**  
By Nan Fairbrother. Architectural  
Press £5.75. 0 85139 443 4.

Nen Fairbrother was writing this uniquely perceptive and fascinating book when she died at the early age of 55. Although she came to landscape design comparatively late in life, she had always been involved with and concerned about the countryside and she brings the eye and pan of an artist to discussion of the design of our environment. Love for every tree and leaf and blade of grass is apprehended in her descriptions of plants, and she has suggestions and ideas for town and city planting. She emphasizes the link between ecology and landscape, and the fact that landscape is modified naturally, influenced and changed by man, and she also describes how landscape and our environment in general influence us and our lives. Landscape architecture and design is so popularly understood from the great eighteenth-century parks, Versailles, and Copthallbury Park, and all his works was for the favoured few; it is the working farmers with their enclosures, the falling and the peat-bogging of the inter-war period, the rubble which made the English landscape what it is today, and what we now think of as natural is in fact man-made. What our land really needs to be naturally is a decisions upon the scrub and the woods, more and more indiscriminately used.

In the design of landscape are the climate, geology, wildlife and vegetation natural to the place. These materials are discussed from the miniature scale of a garden flower-bed upwards. The ideal of landscape design is something which makes us experience more vividly the natural scenery of a region, "points of view." Man, the brother of animals, is called to the scene to point out that this is also both providing a relief as well as by enhancing and echoing natural scenery, by greenery, in arid soil or paving, for instance, and also by contrast, with nature, as in glass and steel, or grass surrounded by shrubbery.

Architects often concentrate on the building and forget the space it fills in the surroundings. "For the most important thing—certainly is an open setting—about any building," says the architect, "is the relationship to its site." He also writes about colour and points out how much of a fallacious great is when used as a camouflage; John Piper said that the only really satisfactory colour for a building is black. Many tests and caravans should be compulsory.

Time is considered as an important dimension in landscape, not enough new trees are being planted; many of our immemorial elms and oaks are being replaced by deciduous trees and shrubs of different ages and species in mind, too, effect of the

the late eighteenth and nineteenth centuries by the developers who were systematically destroying and botching them; the original design had no need of them, a paved or dust area was quite enough. Now trees are a lot to hide in cities, but in the countryside they are coming out of doors. Much architecture needs no softening up with greenery; St Martin-in-the-Fields and a windswept hill village are examples. Intermediate landscapes—rough grass as intended, rough grass, not neglected as the semi-wild may well be the ideal for urban and suburban sprawl.

The book ends with a comprehensive list and poetic discussion of trees and shrubs, all lovingly delineated, which is absolutely essential for gardeners in even the smallest landscape.

The illustrations are a joy and are beautifully captioned, but what is painful that this one on the dust-cover is so dull and offputting. An landscape book, making one over the many intractable artefacts like modern waves and council flats, becomes a book for a large section in nature. It should be compulsory reading for all planners and asphalt makers. Landscape design is always the effect of man on his surroundings. Let us hope that there is enough people like New Fabbro to make the underground its potential, to enhance its importance.

## RECORDS SOUNDING OFF

**David Blewitt**

As far as records go, we live in an age of plenty. They roll off the presses in profusion. The repertoire has been considerably enlarged; the art of an older generation of masters is celebrated more enthusiastically than ever. The music is so good, you might think, has the listener been so spoiled.

It is time to note, however, that the end-product is increasingly unfused with the means of production. The music is intended for enjoyment, with growing frequency. All companies stand guilty.

I mention this because CBS's re-issue of Mozart Piano Concertos played with a classical refinement and skill by the late, great, and much-missed Artur Schnabel is a fine achievement. George Szell's sympathetic accompaniments are fully worthy of the soloist. Since, alas, every disc received for review has thumped or swished at some point, intending purchasers are warned to listen before they pay after. Similar caveats apply to the two latest records in the series, which comprise Nos. 26 ("Coronation") and 27 (K.595).

61597-91, L.70, N.85 and N.82 respectively since they are due to their predecessors.

The first two discs feature Heller served on an RCA (LRL) 5084: £2.90 where *faccas cupura* the flawless work of Josef Suk's as his chapel (K.207) and 2 (K.211) with a beautiful and pure tone.

One of the Ezerests d'violinist's repertoire is, I suppose Bach's Unaccompanied Sonatas Partitas. Scholz, critics say plain expertis continue to find a competent beautiful command over the instrument in matters of style, technique and performance, the bow used well and trivially. Hearing the 70th Nathan Milstein bringing all these masterpiece (£26.95 £8.95) heathered tones comes continually. The still piece technique and puts into here inspired by the musician wisdom of a lifetime. The best editions are incomplete album indispensable.

## DRAMA

To the inventors and performers of *Burn Up*, recently produced at the new Ralph Thoresby Community Theatre in Adel, Leeds, getting the audience doing things was all important.

The performance was the production of two weeks' improvisation work in August during the fifth annual summer drama school for young people in the Leeds area, and was made up of numerous scenes, some dance-based and some verbal. The scenes of hate, passion, love and intimacy were sewn together into a patchwork of whole.

It contained the ubiquitous screaming coloured woman from *My Poppin'*, a ranting pauper's feminist who urged her hysterical followers to massacre all men, a flying saucer accommodating both audience and cast which boldly probed the frontiers of involuntariness, a ritual to dispose of a church witch and eyeball-distorting film with a powerful strobe. All

lacked was a dais to place the speaker and chant PAR-TIC-I-PATE.

We were eager and bawling into the microphone, and the National Anthem, twice, the mode to pass cardboard boxes to the performance area was to put our heads between our arms and the speaker and to pass the boxes to the house." The scientist said.

"The only volunteer to plant, who went on to be a central figure."

We all enjoyed this involvement, which was the first time the G. I. Joe tradition of Bush's Holiday. The performers tried at times to convey serious statements to the nature of passion and but nothing really emerged. Nevertheless, it timed on, entering the on, explaining, and the forthrightly.

Dick

## THEATRE

### COMING ATTRACTIONS- THE FAMILIAR AND UNEXPECTED IN NORTH WEST REPERTORY

**David Self**

As befits the birthplace of republicans, Manchester (through its municipal theatres) offers a varied and tempting programme of dramatics for the year. Besides providing a night refreshment for willing theatre-goers, some of the productions (together with attendant party frolics) make worth-while all the hostile permission-seeking, block booking and coach hiring that precede the fun. Looking the fifties to a school matinee.

From October 15 to November 10, Manchester's Library Theatres offer Edward Bond's *Bingo* (Shakespeare in retirement, dissatisfied with his achievement, tormented by fantasy and cruel society); and *Bingo* is followed by *My Darling Clementine* (another Arthur Miller's *All My Sons*). Out in the company's sister theatre at Wythenshawe, it is tragically comic. . . . October 16 sees *P. M. Night: The National Health* by a three week run, to be followed by another recent "National Theatre production," *Sunday in the Park, Monday in the Zoo* by a Welshly Welshman. It is a feckly shopped three-act play, a noncommittal family row beginning on Saturday night, breaking out on Sunday and is resolved on Monday.

Lancashire is well served by repertory theatres. One of the most adventurous is Liverpool's, which (although there is a small number of D. M. Hugh Lewis' *Parables* (October 15-November 1). The season of an Irish playwright's return to his native country's cultural

[illegible]

## TV PREVIEWS AND REVIEWS

### WILFS VERSUS PINKS

**My Howarth**

From the Abyss which will  
be shown next Tuesday on BBC  
1, 6.05 is the first in a series of  
FF programmes entitled Never  
of Paradise which together  
will be the curtain-raiser for  
the series of six programmes,  
*Singles In Working Class His-*

The first series aims to create  
an impression of Victorian life, and  
from *The Abyss* opens with  
John Smith, a fifteen-year-old  
child, telling a factory inspector  
he had "never heard of Para-  
dise"—conveniently resuming us  
to labour, to dark satanic mills  
and the legions of the unschooled  
and at the same time giving  
producer a catchy title for the

Obviously, most of those who  
the series will have heard of  
it: we have come a long way  
from bad old days. We can  
assume that most of us are

After *The Economist's* opening declaration that all classes have benefited from the recent great advances in industry and trade, the commissioner-inspector sets out to take evidence of the working classes' views at mid-nineteenth-century England are, surprisingly, at variance with *The Economist's*. Between visits to the father of a child crippled by factory work, a chimney sweep, a young female collier (played by ex-Liver Birdie James), and similar, the commissioner-inspector comes back for short, civilized ding-dongs with *The Economist*.

Between times a working class couple sing, in an embarrassed, Brechtian sort of way, a ballad called "Poverty, poverty, knock".

In the last round, when the *Economist* wears clouds, a new *Exhibition of the Great Exhibition*, the commissioner-inspector is unmoved. There's no KO decision but it is clear who has won on points.

The other three programmes in this first series will be about the lives of servants, the migrations of

This term there will be five radio A

vision programmes for schools as part of French, German and Spanish series. Each of these programmes is an independent unit within the series and can be used fully or partially, and as a starting point for other programmes or not. Although general criticisms, such as too optimistic estimates of pupils' linguistic competence, artificiality of presentation and questions of pace, can be levelled at some of the series, in general, the radiovision programmes succeed more obviously in motivating and informing students.

To follow the radiovision programmes, you must order the teacher's notes, the filmstrip and the separate radiovision booklet. This booklet is essential since it gives notes on frame changes and information about the content which is not contained in the teacher's notes. It is worth knowing that the "legal" use of radiovision broadcasts now extends for three years, so material recorded this term can be stored until July 1978.

La Provence. This ought to be the easiest audience—by definition they know more French than other Europeans and should be better motivated. In practice l'Œil de France has disappointed. The programme is suitable for university work with a French teacher, but not for pupils of French in English. It omits too many of the clichés of French life, and the views of France and French people exemplarily typical, but unrepresentative. The programme is somewhat the sort of experience one might expect to find in a French film. It is not so good as it seems. The French people will suffer from the inconvenience to find, fail to set sight on, and miss the best of the French contemporary sixth-forms, even the class who can master the dialect.

The only radio/visual programme for German schools is for O-level. The work in the *Halla Gewissen* series is good, but the programme is too short. It will be broadcast on Monday and will be broadcast on October 24 and 31 at 9.45 a.m. Teachers will find this programme useful for a wide variety of classes up to A level. At O level, it will need careful presentation, since the use of the vocabulary will be unrepresentative. The best approach would probably be to repeat the text of

**Project the Right Image.** Colour 13 minutes. A CTV/C Production. Inquiries to Churches Television and Radio Centre, Hillside, Merry Hill Road, Bushby, Watford WD2 1DR.

Considering that film has been around since 1895 (so far as Britain is concerned) and that 16mm film has been available to the general user in increasingly generous supply since the inter-war years there is an astonishing amount of poor projection. And the film industry has done remarkably little to improve matters.

This film is therefore a welcome attempt to redress the situation. With its mixture of cartoon and live action it makes an amusing presentation which exaggeratedly describes how not to do things and then sets about telling you what should be done.

# DRAMATIC MILEAGE

...are some excellent sebools  
Adding programmes re-starting  
...of DRF 1 this autumn.  
...and DRF 2 for seven to  
...group goes out every Wed-  
...from 2 pm to 2.20 p.m. If  
...two broadcasts, on move-  
...ills and waxworks and shop-  
...ed waxworks are anything  
...ed, this is a series no drama  
...with a taste for life-enhanc-  
...celebratory programmes can  
...mies. James Doddlog and  
...esh with loving care, so

were harder to follow. The work is more complex for the more advanced age-group but this does not excuse poor teacher's notes, which for example omit all mention of the music used in the series. The next programme is on Monday.

Neither series give instructions about diaphragmatic breathing. Nor do they show how the principle of exhalation is more important than inhalation, contrary to what is taught in most schools. This is a great shame, and an opportunity missed.

everyday occurrence. The influence of Germany "over the

A radiovision programme is included in the new series of *La Parole aux Jeunes*. Designed for third-year pupils, this term's broadcasts take account of the difficulty many pupils have had in previous years of understanding interviews with French children. The scope of actuality recording has been broadened and a modular presentation devised to make it more suitable for mixed ability groups.

been reported this term together with the national programme *Let's go to the Museum*. Here, again the pupils are urged to make use of immediate appeal to younger, 15-year-olds, but could be validly introduced in later stages of the school. Indeed, since the series employs the vehicle of three Spanish students returning to their homeland, the information given in the accompanying changes that have occurred in their absence, the information given is more suitable for interested adults than well-motivated college freshmen for O-level schoolchildren. However, the pictures of paintings shown in British galleries have been well

There is no reference to leaviness in a centre aisle, routing cables, because the minimum is needed, and having someone with a torch to guide lotsa arrivals to their seats.

Soma of these objections are countered if it is assumed that the film should not be used on its own, but should be included in a television programme when items like this

## BRIEFINGS

# RADIO AND TV

## Further education

Corp. On Learning. (Sunday, 9.45, BBC 1. Wednesday, 19.05, BBC 2)

Helps those who left school early to gain the necessary confidence and ability to seek out information, analyse it and present it. Useful for teachers and evening classes.

In the first programme Albert Smith mobilises his friends to stand up for themselves in discussions with the local authority.

Measurements in Education. (Sunday, 11.45, BBC 1)

Shows programmes to provide a background to the kinds of measurement used in education today. Assessment techniques are illustrated with examples of selection at different levels from pre-school to university.

Living Decisions. (Sunday, 15.30, VHF 4)

This course on 'thinking in action' concentrates now on decision making in the family and community. An optional assessment is available for GCE O level 'family and community studies'.

There are 24 programmes to follow this week's introduction.

Never 'Hard of Paradise. (Thursday, 23.05, BBC 1)

An impression of life in Victorian

**for schools**

**Countdown.** (Monday, 9.38, BBC 1)  
—Aimed at 14 to 16-year-old pupils, this programme is designed to develop the use of low ability. It uses frequent changes of topic to stimulate interest. Each programme is an independent unit, loosely related to general themes. In 5 issues To Win various mathematical permutations are developed around the chance of winning competitions.

**Merry-Go-Round.** (Monday, 10.00)  
Thursday 9.41, BBC 1)  
—A unit on puppets this week shows seven to nine-year-olds how the traditional stringed marionette is made. Film of action at The Little Angel Marionette Theatre, Islington is intercut with sequences of school children creating their own puppets.

**Explosion Man.** (Monday, 10.15)  
Thursday 9.41, BBC 1)  
—"Party Time" introduces 10 to 12-year-olds to anthropomorphic techniques for illustrating "man" behaviour. Shows how all societies celebrate key experiences; undresses conclusions with film from an informal teenage party and the Jewish Bar Mitzvah celebration for 13-year-olds.

**News: All Round.** (Tuesday, 10.25)  
BBC 1)  
Nine to 11-year-olds learn how sounds are made, who determines

tion of the over-ages, the attention of their teeth. They receive visits to the dentist and the importance of oral hygiene.

**Pictures Book** (Tuesday, 11.20, Thursday, 10.18, ITV)

A miscellany series for eight to 12-year-olds including stories, poems, films and suggestions for art and craft work. "A Life Apeert" deals with the fishermen and the loneliness and superstitions surrounding hula occupation.

**History in Focus** (Tuesday, 14.20, VHF, 4)

A look at totalitarian states, focused on life in the Third Reich. Aimed at 14 to 17-year-olds but you are recommended to listen to the programme before using it with class.

**Nature** (Wednesday, 14.45, VHF, 4)

"Nature at Night" is a radio-visual programme of interest to all primary children. Features many of the animals active between dusk and dawn, with special emphasis on predator-prey relationships.

**Living Language** (Thursday, 14.00, VHF, 4)

Six poems by John Wain, each describing a part of a day at school. Written imaginatively and frankly to stimulate nine to 11-year-olds in their use of language.

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